Indexed complete.

No. 15.

Field-Book of Willis L. Jepson.

-1906-

-If lost, finder please return by post to Dr. W.L. Jepson, Dept of Botany, Natural History Museum, Cromwell Road, South Kensington, London, S.W. and receive reward.

Miscellaneous Notes, Kew, Oct. 1905.

- Spiasbium angustifolium, Comanche, Amador Co, Hansen.
- Gamble. Coll. Los Angeles, Isle of Catalina, teste Spiasbium angustifolium Lahg. Plants through Nuttall.
- Umbellularia californica was first published by Nees ab Esenbeck, Systema Laurina, p 463 (1836) on a Bot. Beechey plant had from Arnott.
- Quercus lobata. "On quitting the coast for the interior we exchanged the evergreen oaks for the deciduous species. The latter grow to fine trees with wood of great specific gravity. But the natives have a very pernicious habit of lighting their fires at the bases, and as they naturally select the largest, it was really a sorrowful sight to

— cont 2 pp ahead —

Kew Herbarium

= Calif. Plants. coll. by Douglas.
Peucedanum macrocarpum
Aphanostrum angustifolium.
Vitis Californica.

= Guirado, F. Collected Ornithera
Bottae at Monterey, State Survey
number 701, June 11, 1861.

= Botta, M.P.E., traveler of the
Natural History Museum of Paris,
made a voyage of circumnavigation
in the years 1827, 1828, 1829, on
board a trading vessel named
"le Héros, commanded by M.
Duhaut-cilly. Collected in California
the reptiles forming the basis of
the paper "Description of Several
Species of Reptiles of California"
by M. H. D. de Blainville, Nov. Ann.
du. Mus. d'Hist. Nat. 4; 233 (1835);
also coll. Godetia Bottae in S. Calif., l.c. p. 393.

Oct. 28, 1905.

Cut. from 2 pp. back –
behold numbers of the finest trees
thus prematurely and wantonly
destroyed. And it is not a country
where wood is superabundant." –
R. B. Hinds in preface to Botany of
the Sulphur, p. 3.

- Richard Brinsley Hinds. Euphorbia
Hindsiana, Benth, Bot. Sulph. p. 51.
Cape San Lucas.

- Quercus Ehrgelmannii – In San Rafael
Mts., 5000 ft., May, 94, leaves and
very tomentose ovaries only. Coll by
Dr. Franceschi (+ distrib as Lobata!)
Looks like a small and ~~very~~ some-
what narrow leaved Douglasii!
Very pale and glaucous.

Kew Herbarium

- Quercus lobata
- J. D. Hooker and Asa Gray } Coll. Quercus lobata on the Tuolumne, '77 leaves 15 cm. long! (that is, the longest) not inc. the short petiole.

- Quercus Douglasii Benth Pl. Hartwegianae, p 337 = Garryana teste Hartweg's Sonoma spins!!

Oct. 28, 1905.

- Mr. Hemsley has just shown me one of his new species of Eryngium having clusters of fistulous leaves. I told him about Eryngium Californicum of Napa Valley which germinates in the beds of winter pools, produces tufts of fistulous leaves which disappear when the water goes and are succeeded by flowering shoots with different kind of leaves in the dry season. In other words there is adaptation to the seasons as well as to the general climate and conditions. The flora of the vernal pool is very interesting and deserves a special paper.

Kew Herbarium

-Bridges, Thos. Went out to Chile to collect, sending his plants to Arnott, Lindley, Bentham but especially W. J. Hooker. In the Hooker Correspondence are found letters as follows:-

Quillota, May 4, 1832
Santiago de Chile, Sep. 3, 1832
Valparaiso, Oct. 25, 1832
Valdivia, Feb. 26, 1833
Valparaiso, Aug, 27, 1833. Also 10 others up to, Apr. 8, 1842.
Coquimbo, Nov. 20, 1841.
Cochabamba, Apr. 3, 1845
Valparaiso, May 21, 1844.

In 1841, June 14, Valparaiso he writes to Hooker and explains his long silence of (about) 8 years by saying that he had sacrificed his time to agriculture with little benefit to

Nov. 7, 1905.

himself but that he now means to give as much time as possible to Natural History. He collected birds as well as plants. Speaks in most words of cordial gratitude to Sir William Hooker as do all the collectors of that day.

The letter from Cochabamba (Bolivia) is published in full in Hooker's London Journal of Botany, vol. 4, pp 577 to 577. (1845.) He speaks of Cochabamba as being the most delightful climate that he had ever experienced.

He returned to England with Victoria regia, the first to introduce it into European cultivation. Under date of July 21st, 1846, he writes to Sir William: "I have charged 2/- for each seed; flowers in spirit with a

Kew Herbarium

dried leaf one guinea." From Bristol Dec. 8, 1846 he wrote a very discouraging letter concerning his long illness: "I have now the mortification to find myself with a broken and ruined constitution as a reward for endeavoring to promote Science" But he improved rapidly after this and from Bristol on Jan. 14, 1847 acknowledged Sir William's kind congratulations on his marriage!

The first botanist to discover the Victoria regia was Haenke (cf. Annales des Sciences Naturelles, Ser. 2, vol. 13, p. 55, 1840). This first discovery was referred to by Hooker in his folio maximo

Nov. 7, 1905.

on "Victoria Regia", London, 1851. Haenke's discovery was about 1801. Many attempts were made to introduce it but failed. Bridges' seeds (Aug. 1846) germinated but they perished (Dec. 1846). Introduced successfully by Dr. Hugh Rodie and Mr. Lachie of George Town, Demerara, in 1849. Bridges returned to Chili via Panama in 1847. (Such his intention acc. to the Jan. 14, 1847 letter). I do not seem to find another letter between this time and the period of his settling down in California. There appears to be but one California letter. It is here transcribed:

San Francisco, May 5, 1858.

Sir W. J. Hooker

Royal Gardens,

Kew.

- over -

Kew Herbarium

My dear Sir William:
By the last mail enclosed in Mr. Brenning's letter I received your kind note written to him dated Feby 26th. I now beg leave to answer your question – to know if it was my intention to remain in California. Permit me to say in reply that I am so delighted with the climate and interested in the Natural History of the country that I have neither intention nor desire to leave it and so long as I remain here I shall continue to collect specimens of Plants, Seeds, Birds, Quadrupeds and in fact any subjects of Natural History as time and opportunities will

Nov. 7, 1905.

permit me to do so. I can scarcely describe to you how pleasing and gratifying it has been to me to learn that in my collections you have found some new and rare plants – I was partially under the impression that from the labours of Douglas, Hartweg, Jeffrey, Lobb and other travelers from Europe with the many United States Exploring Expeditions that little or nothing remained to be discovered and only gleanings were left for those of the present day. – Although it is necessary to take into consideration that since the Gold discovery many new and extensive fields are open to the traveler where in former times

no one could penetrate with safety from the Indians and other causes. -I am now firmly persuaded that on the summit of the Sierra Nevada there is a fine field for the Botanist in whatever degree of latitude he may direct his attention. This I know from experience as I found a great difference in the plants which I gathered last year in the Mariposa County from those which I collected on Scotts and Trinity Mountains near Yreka towards the borders of Oregon although they were situated about the same elevation viz from 4 & 5000 ft. I figure to myself that you must have experienced

pleasure when you saw the specimens of the Darlingtonia Californica ~ Fremontia Californica, Lilium Umpquaense? and the singular Sarcodes sanguinea. The later possesses a most extraordinary tuber which I found at the dept of 18 inches from the surface of the soil - Unfortunately it will not keep so I have doubts if it will ever be cultivated. I found it common under the shade of those magnificent trees Picea grandis and P. amabilis near the summit of the Sierra Nevada in the Mariposa County. The noble white lily which I have numbered 270 and which I suppose is

Lilium Umgnaense is also a charming plant well worthy of a place with L. lancifolium. it has a most delightful perfume and it will be perfectly hardy, growing high up the slopes of the Sierra Nevada in the Pine forests. Seventy fine bulbs of this plant I lost with many others in that ill-fated steamer the Central America. This summer I hope to be able to replace them. Cupressus Lawsoniana must also have called your attention - whilst speaking of this fine tree allow me to ask if there is not great affinity in the cone with Sequoia sempervirens only on a minor scale - the bark of

Cupressus Lawsoniana differs from every other californian cypress - probably it may be a connecting link between Sequoia and Cupressus.

Now I am aware that you are in possession of my collections I hope you will preserve the nos and I will shortly forward you a copy of the Catalogue which I made out when I divided the specimens. In it you will find the locality of each plant and I now regret that I did not forward it when I sent the collections. It is similar to the lists of my Chilian Herbarium. Please let me know if you intend to publish the species

which may prove new and also in what work.- In the Library of the N.H. Academy of California I find a copy of the Botany of Captn Beechey's Voyage which has given me much information on the plants of this country and a friend here also possess Hartweg's plants. In the Library are also found many of the works of Dr. Torrey of the U. States- Thus gradually I am becoming acquainted with the Flora of California.

A few days since I returned from a months excursion in the mountains along the coast, Santa Clara County 50 miles south of San Francisco - During

I have made additions to my herbarium but birds and quadrupeds called most my attention. -by this mail I have forwarded to Mr. Cuming a very interesting collection. Nevertheless I never omit making specimens of Plants when I find any that I did not procure last season. I am in hopes that during the summer I shall be able to collect from two to three hundred species which I did not possess previously. The Oaks which are very numerous in variety in California have claimed my attention and I have now specimens of several species with the male flowers, al-

Kew Herbarium

though few species are celebrated for timber. They are deserving of a place in Parks and Arboretums on account of the beauty of their growth and foliage.

I should feel much pleasure in complying with any suggestions which you could give me relative to the Botany of this charming country and I should at all times take an interest in fulfilling your instructions. Hoping to have the pleasure of hearing from you

I remain Sir William
Your Obed.t Serv.t
Thomas Bridges

Address
Care of W. Lane Booker Esq.r
H.B.M. Consul
San Francisco - California

Nov. 7, 1905.

The above letter is in the Hooker Correspondence, vol. 64, letter 20. It is the last received.

Cf. Senecio Bridgesii in Bot. Beechey.

= A.F. Beardsley, writes to W.J. Hooker as follows: (Hooker. Corresp. vol, 64, no. 17.)

San Francisco, November 8th, 1856.

Dear Sir:

I have taken the liberty of sending you through the hands of Mr. Alex S. Taylor of Monterey a package of Seeds, Specimens, Etc. of the Coniferæ of California; which beg your acceptance. A Memd please find enclosed. The collection is not so complete as I had intended, having been disappointed in obtaining several species that I was in search of: particularly the

oaks, two var. of Live Oak, abounding in our high mountain districts I think would be valuable. Also the Abies bracteata I intended to have sent. but after spending 19 days in going for it- I had the mortification of finding that I was too late in the Season. I did not obtain a cone and but a mere handfull of seed.

All the descriptions that I have seen of this remarkable and most beautiful of all the firs have failed to give any correct idea of its appearance. In the locality that I visited; Santa Lucia Mountains, it grows to the height of 130 to 150 feet, straight as a line, the trunk tapering,

from the ground to the top, as regular as it could be hewn and retaining its lateral branches fine and healthy to the very base. I have never seen it deprived of its lower branches; which are slim and graceful; except in thickets where it was impossible for them to grow. Its outlines are those of an elongated pyramid for two thirds of its length surmounted with a spire, the pencil of the artist could not give it a more regular shape than it appears in nature.

I would consider it a great favor to be put in communication with some one or more persons who would like to obtain as

Kew Herbarium

merchandise a quantity of the seeds of conifera of this country. I am well acquainted the localities of every desirable variety, and the season for collecting the fruit and can obtain them in any desirable quantity and would make it my business to do so were I to receive sufficient encouragement. I would state that every one of the specimens as per enclosed memorandum I have collected myself.

Begging to be excused for the liberty I have thus taken, I am

My dear Sir,

Very Respectfully yours

A. F. Beardsley.

To
Sir William Jackson Hooker,
Director: Royal Gardens, Kew.

Nov. 8, 1905.

The list of coniferous seeds (19 sp.) are labled North California (doubtless collected on the trip with Murray to Shasta), and South California, i.e. middle coast region.

= Hooker, Sir William Jackson, elected an Honorary Member of the California Academy of Natural Sciences May 12, 1856. Notified Feb. 12, 1857 by Dr. W. O. Ayres. Cor. Secy.

= A. F. Beardsley, writes to Hooker, 19th May, 1857, that he cannot well visit Vancouver Island; also that Mr. Bridges and Mr. Wm Lobb are both in the country, etc (Hook. Cor. v. 64, no. 19)

= Lobb, Wm., one letter to Hooker re shipment seeds, – (Hook. Cor. v. 64, no. 267)

Kew Herbarium

= Brewer, Wm. H, letters to W. J. Hooker.

(1) Sept. 19, 1896, says he wants a perennial forage plant for California. Intensely hot summers with hot dry days and cool nights. Most valuable forage plants Erodium cicutarium and "Avena sterilis" (wild oats of the hills). Alfalfa introduced but does not answer hopes raised by it. Smith Coast Ranges, radiating ridges from San Bernardino mass, each chain having different height (2-7000 feet), dif. Geol. structure, dif. features, and impart dif. aspects to the scenery. All very steep and abrupt, cut by numerous cañons and gullies and sharp ridges, destitute of forests save near the sea, covered with chaparral of low shrubs making them exceedingly inaccessible. Chaparral = manzanita, Ceanothus, scrub oaks, mostly thorny, 3 to 12 ft. h, must be met to be appreciated. The valleys open to the sea N.W. have a fierce current of air drawn up them every day; extends more or less to the mountains but not as much as might be expected; the result is the mountains are the hottest. 90° F. at 5000 ft. and 99° at 3000 ft. I have found.

(2) Aug. 12, 1862. Oak growing under the greatest variety of conditions is Quercus agrifolia, symmetrical head over 100 ft. diam, foliage peculiarly rich and dark green. Quercus evergreen

Nov. 9, 1905

Kew Herbarium

Hindsii our most beautiful species 16-20 ft. circ. being common sizes. Platanus generally branching from the root. "Good collectors or accomplished Botanists resident in this state"? I can say unfortunately, No. Dr. A. Kellogg has described a number of new species but is resident in this city and does not collect to any extent. H.G. Bloomer, Esq. is an amateur much interested in Botany but does not collect. A young man has recently arrived, a Mr. Bolander, who I think will collect considerable".

(3) Dec. 8, 1862 anent Darlingtonias orig. habitat. Sends seeds.

Nov. 9, 1905.

(4) Oct. 20, 1864. Just before Brewer's departure from California by the Overland Route he writes of his work on the Survey, hardships in the mountains, etc., altitudes of the southern Sierras, Big Trees, (& great expense attaching to getting out a log section to comply with Hooker's request for a section).

Brewer spent the winter at the Gray Herbarium, at work on the following California Plants

(5). July 22, 1865, New Haven, writes that he has been in " " for last 3 mos. First summer for 15 yrs spent in New England; praises its beautiful forests of deciduous trees, its picturesque landscapes in such vivid contrast with the

Kew Herbarium

scenes of the last few years on the Pacific Coast where the rainless summer forbids" the green turf and pastures "New Haven is one of the loveliest cities of the United States and it is needless to say that I have enjoyed greatly my return to the privileges and luxuries of a civilized life again." Signed, W. H. Brewer.

Brewer never returned again to desolate California! unless perchance for a short visit with Sargent. It is plain from these letters and from Brewer's subsequent career that his interests were economic. He collected very few plants, considering that he was in the

Nov. 9, 1905.

field four years. Of course he had many duties and assigns this as a reason (to Hooker) for not collecting more. He seems to have gone at the flora with preconceptions, at least that the species were mainly described. In letter no 1. above he says in speaking of the great ranges of temperature: "As a consequence not only the forms are peculiar but certain species sport in local varieties in the different chains. - I think that many of these varieties have been described as species. I hope to throw some more light on this upon this most interesting subject by future labors and collections"

Kew Herbarium

The above letters are in the Hooker Corresp. vol. 65, nos. 6-10.

= Botta, M.P.E, cited in Spach's Monographia Onagrearum, in Nouvelles Annales du Meséum d'Histoire Naturelle (1835) vol. 4. as follows:

1. Holostigma Bottae Nob. p. 336 Southern Calif.
2. Godetia Bottae Nob. p. 393 " "
3. Godetia Willdenowiana Nob. p. 388. (about Monterey

No. 1 = Oenothera micrantha Hornem?
No. 3 = ~~Godetia~~ Oenothera purpurea {Willdenow}

All are marked V.S.sp., showing Botta collected and dried specimens of plants in California. Further details concerning his visit can probably be found in Bancroft or some French Biographical Dictionary.

Nov. 14, 1905.

– Trifolium Wormskioldii Lehm Ind. Sem. Hort. Hamburg. 1827. p. 17. Full descrip in Act. Nat. Cur. 14; 823; t. 45 "Semina e California attulit Cl. Wormskiold."

– Nemophila atomaria F. & M. figured in Gartenfl. 13, pl. 442. 4 flowers, showing variations in degree of black-purple spots or areas, 1/3 to 2/3 of petals, or one fl. with black dots merely. Ground of 3 of the fls. white, the other blue. (On same plate is figured insignis (blue, blue + white, and white) and maculata.

– Kew Herb: – formerly mounted sheets were placed in the Herb once a year; (accessions) now it is done once a quarter.

– Lewisia brachycarpa B at Cal. i. 79 =
" " – calyx!

Kew Herbarium

Godetia

= Godetia amoena.

"Oenothera amoena. O. pubescens, caule herbaceo tereti purpurascente, foliis lanceolatis obtusiusculus subdentatis glaucis, petalis calyce triplo longioribus, capsulis subteretibus. Hab. in America septentrionali. ⊙" From "Semina in horto botanico Hamburgensi 1824 collecta," etc Lehmann. Hamburg, 1824, p. 20.

In the Index Scholarum (1828) Lehmann gives a description of a page and a half (pp. 22-24) to the species beginning with the above diagnosis in italics and at the end this: Ind. semin. hort. Hamburg. 1821 pag. 8, etc. That is

Nov. 14, 1905.

to say the description printed in the seed-list of 1824 was, doubtless, a reprint of the seed list of 1821. Lehmann often reprinted verbatim his diagnoses. The full description just referred to is reprinted in Nova Acta Naturae Curiosorum, (Bonn, 1829) vol. 14, p. 811, t. 45.

- Tsuga Pattoniana and Hookeriana. The latter came from seed gathered by Jeffrey. Henry, who has been working on it some time, cannot find that Hookeriana (serrate leaves) exists in nature. Thinks it may have been a garden sport. Cryptomeria elegans = a seedling of C. Japonica, yet looks nothing like the latter. Henry asks me to watch for it in the field.

Kew Herbarium

= Botta, M. P. E. Mr. A. A. Eaton, who has kindly looked up the type of Godetia Bottae at the Jardin des Plantes, Paris, says one sheet is marked "californie, Monterey, M. P. E. Botta, 1829."

= Dr. Henry tells me that Cryptomeria Japonica naturally layers in Japan, the sweeping ends of the branches taking root and forming other trees. Does not stump sprout. Says that Araucaria imbricata stump sprouts when cut down.

= Gilia inter texta Steud = Nav. inter-texta Hook.

Nov. 20, 1905

= Malacothrix Clevelandi Gray. Antioch, M. K. Curran, 1884. Achenes a trifle under 2 mm. long (1.8 mm). Heads numerous. Involucres 5 to 6 mm. high. Plant 4.5 dm. high. Branches numerous and from the base upwards but forming a rather close panicle. Stem reddish. Leaves mainly in a basal tuft. Also coll. at Drytown, Amador Co., Hansen, 401, June, '93, 1.1 cm. high, the ~~numerous~~ many stems ascending from the base. Involucres 4 mm. high. Also Chalk Hill, Hall, 2087, 5000 ft. on San Jacinto Mt. Southward into Lower California.

Kew Herbarium

= Douglas, David. Publication of new species, the seed collected by Douglas in California, by Benth. Trans Lond. Hort. Soc. 2 ser. i, 403, with some account of his journeying. This paper deals with some of the most common and beautiful of the Californian herbs and shrubs. There are references to prov. vols as to the sending out of Douglas.

- If a man has made no blunders it is because he has done nothing! - Geo. H. Bentham.

"Long Valley" - There is a Long Valley in Plumas Co where Bolander collected teste Gray. Proc. Am. Acad. 7; 330. Maybe Bolander was not in Long Valley, Mendocino, as I have thought.

Nov. 20, 1905

= Acer californicum is of Dietr. not Greene as latter implies in Fl. Fr.

- Botta, P.E. - First collected the California Road Runner; gives a descrip. of it in Ann. Mus. Hist. Nat., 1835, vol 4. p. 125. Says it exists from Cape St. Lucas to Part of St. Francisco and that the Spanish colonists call it Churea. There is a large and beautiful, colored, double plate of the bird.

= Dr. Henry. The plant referred to in Erythea, 6; 123 is Actinotinus sinensis Oliver. Poor Oliver was overwhelmed with confusion when the truth came out says Dr. Henry. It happened just before Henry was leaving China and it was packed without his examining it.

Kew Herbarium

= Baker, J.G., is quaintly humorous. He spoke of Wallace's statement in his autobiography that his interest in science dated from first learning with great surprise when about 16 yrs old that plants had names, as ~~granted~~ curiously interesting. Baker's own interest in plants began early but was not encouraged by his relatives. They regarded it as foolishness, nonsense, a peculiar bent. That is they looked upon it as being with the boy quite individual! When they discovered that other people devoted themselves to Botany they were quite staggered!

I may add that my own real interest in plants began with

Nov. 20, 1905.

the discovery that all the "wild flowers" about my home in the Sacramento Valley had scientific names. This was like opening a new world to me in the possibilities it held out. It absorbed all my thoughts and interests immediately and my imagination was given free rein. This happened at a little private country high school with a big name, the California Normal and Scientific School, but with a good inspiring teacher, W.G. Stevens, a born teacher for he could teach anything interestingly.

- Fremont. His numbers of Calif. Coll. run to 479 (1846 year).

Kew Herbarium

Godetia Synonymy.

="(Godetia) lewella var tenuifolia Lindl?" of Bentham in Pl. Hartw = G. biloba!

= rubicunda of the same = G. Bottae!

= lepida " " " = G. purpurea!

= Oe. viminea var.? parviflora H.+A. in Pac. R. Rep. 4, coll. by Bigelow, Napa valley = quadrivulnera, (ovarium canescent, petals 1 to 1.2 cm. long.)

= Oenothera lepida, Pac. R. Rep. 4 is Godetia purpurea! (Plains of the San Joaquin near Stockton and Knight's Ferry.

Dec. 20, 1905.

= Picea Sitchensis. Dr. Henry, who has worked out the matter thoroughly, say the authority for the above should read "Carr." not "Trautv. + Meyer" as per Index Kewensis, Sudworth, Sargent, etc. The latter citation appears in Middendorff's Reise, Florula Octotensis 87. Originally published however in 1856 as cf. Trautvetter: Florae Rossicae Fontes.

= Geo. Bentham:- Baker, J. G. says that Bentham was working here twenty years after he came; fraternized not at all with the people in the Herbarium - went up to his room and worked there. If he had anything to show he took it to Oliver, the Keeper, with whom only he talked.

Kew Herbarium

= Dr. Henry says that Lowiana, concolor, grandis are clearly distinct as they grow here at Kew. He goes on the leaves of lateral branchlets their shape and size, and on the winter buds.

Abies grandis, distinctly pectinate; notched at apex.

Abies Lowiana, not pectinate but turned upwards so as to make a low V- shaped trough; notched at apex.

Abies magnifica, curving upwards from below, thin on top curving as well; 4-sided.

These are characters well recognized for typical material but Lowiana is not usually notched at apex. The trouble is one does not usually know from what part of the tree the material comes. It were

December 26, 1905.

best to specify in Keys: Leaves of lower branches so and so.

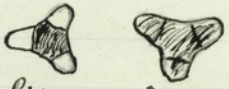
Firs young are typically smooth barked.

Spruces young are typically rough barked.

= Drummond, . Grandson of the North American Drummond is living here in Kew, explorer working on Indian botany. He spoke of his grandfather's death at Havana on board a Spanish sloop which brought him from Texas, of yellow fever. A sad end, among rough soldiers. He was buried by the Jesuits who put up a monument to him in the church. His herbarium & papers which he is supposed to have had with him were all lost. Drummond spoke of the interesting distribution in Asia of the Desert Flora - always appearing on desert alluvial alkali.

Kew.

– Clarkia Xantiana, Hall, 6305, Fort Tejon. The authers are



biloba Xantiana.

dark purple on one side and almost white on the other. So that Halls' 5084 (G. biloba var subulata) could not be the same, the structure of the authers being wholly different. The pollen-grains are much alike being represented above.

– Mimulus cardinalis, Trans. Land. Hort. Soc. 2-ser. I, plate 3.

– Antirrhinum virga Gray, Lake Co, Rattan!

February 3, 1906.

= Had dinner today with Sir. Dietrich Brandis. He also invited young Mr. Cotton an assistant in the Herbarium. Sir Dietrich said; Mr. Pinchot is a very able man. He is what you call "A Man of the World". He knows how to meet men; he is tactful. He is of French descent. The grandfather of the elder Pinchot was a soldier in Napoleon's army, taking part in the 100 days, from Napoleon's leaving Elba until Waterloo, the One Hundred Glorious Days of France. Yes. Well, after that he decided to leave France; he thought it best or perhaps he had to. He went to New York. On the great western wagon road leading west through Pennsylvania was a stopping place, a store

Kew

where they had food and necessaries to sell, where travelers could stop, etc. Will Pinchot went to work as a servant in this store. He was young and handsome, eventually married the proprietor's daughter, the business prospered and so was founded the fortune of the Pinchots — a great fortune of which the family have made good use. In 1890 (?) the American Academy of Arts and Science was asked by a Committee of Congress to name a Committee to make a report or rather recommendations concerning the forests and forestry in the U.S. Sargent was Chairman of the Committe. He chose

Feb. 3, 1906.

Pinchot as Secretary to the Committee. A quarrel arose regarding certain forestry policies and Pinchot sided against Sargent. Pinchot was right but I have in vain since that time attempted to bring them together. Sargent has'nt much idea of what forestry really is and does not pretend to have, but he has done a wonderful amount of hard work to promote the feeling for forestry, with his 10th Census Report on the Forests, his Garden and Forest (to which I often contributed) and the Silva, where there are too many names changed but some of them will doubtless last because of the weight of the work. Did you know that they had quarreled?" No, said

Kew

I. "I could scarcely imagine anyone quarreling with Pinchot but if he should quarrel with anyone I should suppose he might with Sargent" This speech amused Brandis heartily. He laughed and said: "You speak with all the precision of a mathematical formula". And again he laughed. He says botanists do not appreciate sufficiently or indeed take any notice of the marked differences among trees as to their rates of growth. Oak is slow, Pine is fast. Yes. But there are conifers slower in growth than the oak as the Yew, there is the Spruce faster than the Pine, the Redwood fastest of all. But then there are broad-leaved trees as the Eucalyptus faster than any conifer. It is all because of the quantity of the leaves or their evergreen character. We do not know why it is."

Feb. 3, 1906.

This constitutional difference is certainly remarkable, but it is interesting that the very tallest trees on the surface of the earth whether evergreen ~~or bro~~ conifers or broad-leaved are

We went after dinner for a walk in the Gardens which was rendered highly interesting by Sir Dietrich's interesting remarks about the plants in flower, the Rhododendrons, the Snowdrops, Anemones, Crocuses, etc.

Kew

– Mr. Skan tells me some very amusing stories about Sir William Dyer's interference in small matters, trivial details. Bookshelves were put in the lower corridor of the Herbarium. Skan and Mr. Hemsley wanted the shelves 1 inch wider but they didn't get their way about it. Finally shelves were put in the upper corridor. Skan made a vigorous effort to have them made 1 inch wider, pointing out that the volumes would project an inch. They must be just like the others said Sir William.
One day Dyer came in and said to Skan: I want the Hooker Correspondence put on those

Feb. 3, 1906

shelves (in the upper corridor). Do it right away. It was done. Skan then pointed out the volumes ~~were~~ too broad. Dyer said: Well, will send them to the bindery and have them shortened. Which was done! it being necessary to fold in the letters, a thing which Dyer abominates. Fancy the head of a great establishment like Kew interfering in small matters like that. He has been encouraged in this by Hemsley referring small matters to him. If a head of a dept acts on his own initiative and does his work satisfactorily Dyer does not interfere. If a man comes to him about trivial details he will take a very strong lead. "What

London to Paris

I have said, I have said" That is Dyer.

= Left London by London Southeastern and Chatham, Victoria station, at 9:10 am. Had a smooth channel passage. Paris at 4:45. Went to Hotel Prince Albert. Had received a letter of introduction from my old college friend "Rich" Heermann to his uncle in Paris which I at once presented. He offered to take me around the next morning to the Jardin de Plantes. There I looked up two types (see 2 pp. ahead.). M. Pagnepain who is working on plants of oriental Asia, French possessions, was very obliging. Was interested in a large herbarium stored in the

Feb. 6, 1906.

wall which he said was made by Josephine, first wife of the Emperor Napoleon, who had a great interest in botany and who was trained by some great French botanist of the period whose name has now slipped me.

I had not been in Paris one half-hour before I readily realized that I was in the most interesting city in the world. Its richly dressed women, its fine-looking men, its elegant shops, broad streets, boulevards, squares and splendid public buildings — la belle Paris! M. Heermann took me on a walk about the centre of the city. I went alone to the Hotel de Ville, Pantheon, Luxembourg. The modern paintings

Paris, France

at the latter place I enjoyed more than the ancient masters.

In the evening I went to the Hermanns for dinner, and afterwards with M. and Madam to the theatre - a variety performance in which monkeys and seals were made to act like men - a thing which showed vastly the intelligence of the animals and yet so many of the performances were of such a nature as to seem abusive to the animals and imitations of man's poorest rather than best characteristics. After this came ballets, etc. It was "frenchy" enough I suppose for any one.

- Mr. A. Thellung, F is working on Lepidium.

Feb. 7, 1906.

- Lepidium bipinnatifidum Desv. type. One stem of an ascending or suberect plant with spreading branches. Leaves pinnate with broad rachis, as much as 3 cm. long, the lobes incisely toothed on both sides. The raceme is perhaps nearly as dense as the Californian "bipinnatifidum" but does not appear so on account of the much longer outwardly curved pedicels. The pods are notched at apex.

A better spec. is the Drummy one mentioned in DC's Systema. Raceme 6 cm. long, subflexuous, pedicels 3 to 4 mm. long. Pods 2.5 mm. long. The rachis is as broad as the lobes into which it passes. Pubescence not obvious to the naked eye. (See bottom of prev. page.)

Paris, France

Godetia Bottae Spach type, two specimens, labeled by Spach, one: Godetia Bottae Nob. (Spach, 1839) Californie. M. Botta. Stem a bit coarsish below, few remote fls. Petals 2.7 cm. long, 2.1 cm. broad, truncate. Calyx united and turned to one side. Leaves narrowed to a petiole like base, 5 mm. wide, 7 cm. long, these being the extreme measurements; remotely and obscurely denticulate or at least minutely denticulate. Pedicels 1.5 cm. long, the one fl. attached to spm. apparently with no or scarcely any pedicel. The other spm: pedicel 1 cm. long, one bud nodding,

Feb. 8, 1906.

the other ascending, abruptly pointed, the latter 2.5 cm. long. Calyx tube about 2 mm. long. Ovary slender, linear, obviously canescent but no more than that. The second spm is labeled by Spach "Godetia Bottae Spach" and in another hand on the same label "Californie – Monterey, M. P. E. Botta, 1829" Flowers few and remote like the other. L.S. 1st spm. Stigmas broadly oblong, united at base. A lower fod still, 2.5 cm. long. Stigmas 2 mm. long. Pubescence not obvious to naked eye.

(N

Paris

= we went this morning to the Louvre. I soon found that Mr. Herrmann was a good art student with matured ideas and it was a great privilege to have him take me through the great art collections. One could easily spend two weeks in the Louvre but as a preliminary survey one day had to do for me. My cicerone is especially interested in ancient and mediaeval art and so we did not spend all the time on the oil paintings but gave much attention to the ancient collections, Grecian and Roman statuary, Roman mosaics, etc. As we came

February 8, 1906.

down a staircase he said: "Fine tubs they had in those days!" It was a Roman bath tub of beautiful proportions, simply and most sparingly decorated. And it looked as if made yesterday. Among the multitude of things I might have overlooked it as a modern ornament. "English-men would not carry that round the world, would he?" There was always a little burst of humor at intervals with Mr. Herrmann which made him very good company.

Paris, France

= The Paris "Underground" is exceedingly popular and at morning and evening the 3rd class coaches are jammed worse than anything I ever saw. The cars make so much noise that conversation is well nigh impossible. I was not certain of the way to Passy and tried the gatekeeper by signs. As I walked away I was overtaken by a most pleasant Englishman who said the gatekeeper had asked him to speak to me. His name is Percy Brammall, student for the Ph.D. at the Sorbonne; his address 29, rue Vineuse, 16e., and incidentally making his way by teaching English to the French.

Feb. 8, 1906

- Left Paris at 2:30 on the Paris - Lyon - Mediterranean express. As long as it was daylight I saw a country of rolling hills, thickly settled for the most part, farms, little plantations of trees. The next morning early we had passed Marseilles and soon were in sight of the Riviera, with glimpses of the blue Mediterranean to the right. We came to Cannes, then Nice and about 10:00 o'clock I stopped off at Monte Carlo to get a glimpse of that famous place. After paying 4 francs for a 2-course lunch I went to the Casino. One cannot enter the Casino unless he is

Monte Carlo, Riviera

"respectable". At the administrative office I presented my official card, was asked to give my profession, age, etc, hotel in Monte Carlo, asked to show my letter-of-credit, etc. Then I got a yellow slip entitling me to enter the gambling rooms. The greatest crowds were around the roulette table - five of them running. About an equal number of men and women. Women of all ages and complexions. Women with high-bred manner; women with the hardest faces that I ever saw in well-dressed women. Women with nervous uneasy faces; women with stolid faces, their eyes never wandering to the stranger. Sweet-faced women with soft gray hair about their temples. Women of the loosest character; women of the very opposite kind. Women with baby faces; women with young clean-cut handsome features, serene and calm, their look that of refinement. The men were as various. The "bankers" were the most ominous lot of tough-looking gamblers and black-legs - as hard as one sees in the gambling hells of Juneau or Williams. The men players were "sports", tourists, business-men out for a stroll, and some with as clerical an aspect as one could wish to see in a high-church

Feb. 8, 1906.

Mentone, France

Episcopalian rector. The rooms were magnificently decorated – the decorations very showy but in keeping with the use to which they are put. I soon tired of it and came away. Having not a bit of the gambling spirit I was not tempted to play even one coin.

Monte Carlo is truly beautiful in its situation on the sea, the Casino crowning a rocky headland. The city is a white and gold city for the most part – like a great "fair" city – but its showiness would tire me out if I had to live in it.

Then I took train to Mentone

Feb. 9, 1906

and after a bit walked out to Sir Thomas Hanbury's place at La Mortola. I met the Curator, Sylvain Berger, on the road and he took me back to the house. I went in, presented my letter of introduction to Sir Thomas who invited me to come the next day and see the garden, take luncheon, etc. The garden must have something like 4000 species in it, chiefly exotic succulents, cacti, euphorbias, aloes, etc. Berger is especially interested in these – systematically. Sir Thomas took me in a walk about the garden. At luncheon I met Lady Hanbury, a brother-in-law (or ? son-in-law) of Sir Thomas, Mr. Peare, and a Lady Northcote. Also Sir Thomas's son.

Mentone

It was a very pleasant experience. Sir Thomas is a retired merchant. went out to China as a young man 53 yrs. ago, in the tea trade. Remarked that tea-drinking is an almost natimal vice with the English. The Germans come next in per-capita consumptim Americans next, the French using but very little. The Hanbury house at La Mortola is an old place. Mary Anderson visited here. She and Sir Thomas did not quarrel until he said: Miss Anderson, this house was built before America was discovered. She replied: Now, Sir Thomas, that is exceedingly unkind of you to say that!

Feb. 10, 196.

Queen Victoria was entertained here in 1882. A piece of the ancient Roman Road, Via Aurelia, is here. Along this road passed Pope Innocent IV, 7 May, 1251; Catherine of Siena, June 1376; Machiavelli, May, 1511, Charles V. and army, Nov. 1536; Pope Paul III, 1538; Napoleon and Army March, 1796.

Herr Berger is a capable man, the Curator of the Gardens, works hard and is publishing good papers but gets only £10 10s a month! Sir William Dyer told Hanbury that it was a shame-fully low price — and they were not on speaking terms for a year!

La Mortola is in Italy.

Cont. next page!

Genoa, Italy.

Came on to Genoa on Sunday. The Italian trains are slow as ice-wagons. Genoa is most interesting to me because of its being the birthplace of Columbus. It snowed the next day. A great change from the Mentone Riviera.

La Mortola - further notes.

Herr Berger has gotten together a truly remarkable lot of succulents. Its great botanical curiosities as ever I saw. Mesembryanthemum Bolusii has opposite leaves one or two close pairs, like a pair of smoothly worn stones out of a creek bed fitted face to face, the flattish sides to the ground. There was another one

Feb. 11, 1906

that would certainly be passed over for a little stone lying on the ground unless one was very sharp - then one notices the cleft across the top. Berger pointed out many examples of the effect of the Riviera climate on plants from elsewhere. A cibus sent from the New Gardens was one "species" on the lower part of the bush and quite a different thing above, the leaves much larger and greener. Sir Thomas Hanbury called my attention to a large-fruited cibus that was one color where the sun struck it fair (green!) all the rest beyond the sunshot an intense golden yellow! Just running the habit in the apple which colors most on the sun side.

Genoa, Italy

Hakea Baxteri has leaves so like a Salisburia that I thought it a sport and asked, How did you get the spines on the margins of the leaves? The fruits were, however, for all the world like those of the needle-leaved species grown in California.

A cactus brought from Berlin, short-cylindric, showed on the lower half the short spines of the kind of its hot house growth, above much longer spines indicated its growth in the open air at La Mortola.

One of the most handsome flows was Aloe floribidens. - handsome dark-red flowers, big plant

There are three pines on this

Feb. 11, 1906

Mediterranean coast: 1. Pinus Halepensis, common about Mentone and in the La Mortola Garden, the cones singularly like those of Pinus muricata, in size, shape and clinging in great numbers in the top of the tree, opening rather promptly however, not remaining closed, and not persisting on the tree as long. Round-topped tree with many sub-ascending branches.

2. Pinus Pinaster (maritima) long-cones like P. attenuata, noticed in the mountainous country between Marseilles and Cannes.

3. Pinus Pinea, characteristic pine tree in the scenery of the Rome-Naples country.

[In the Sante Sabina Garden at Rome is the original Sta. Sabina Orange tree planted by St. Dominick. Sir Thomas Hanbury has a seedling tree from this tree.]

Genoa, Italy

Brachychiton populneus is a handsome tree at La Mortola; noticed it first in the Hotel de Paris grounds at Monte Carlo.

At Genoa I visited the Cathedral which is a large edifice, the blackand white marble alternating in horizontal stripes. It did not please me. Inside it is very plain, the roof of the nave plain while, but the choir is richly decorated, as also one or two of the chapels. The whole Via is lined on both sides with tall ancient palaces of the aristocratic Genoese families. Two of these were given to the city and are now galleries and libraries. The rooms in the Palazzo Rosso were more interesting in their decorations

Feb. 12, 1906.

than in the paintings I thought; the frescoes and the various designs of the floors wrought in differently colored marbles.

Visited the Orto Botanico where I saw Otto Penzig See p. 199. at the Hanbury Botanical Institute of the University of Genoa. He does not look especially like an Italian, has thick short hair brushed straight back from his forehead and has a pleasant manner. He showed me about his building which is the gift of Sir Thomas Hanbury. There is a bust of Hanbury at the foot of the main staircase with the date 1892. The Herbarium is a large one. The bundles are in covers in open pigeon-holes. Penzig admitted that the plan was bad on account of the dust. His museum

Pisa, Italy

material is better housed.. He has a great lot of liquid material in good jars, especially rich in Java material which he has himself collected. He has written a paper on Java Phalloidæ, showing me a peculiar species with a free lace-like veil about the stipe. A cucurbitaceous gourd, oblong-globose, about the size of the hat, had delisced so as to be open on the whole top, showing the seeds which were flat with very broad white-membranaceous wings, very suggestive of Bignoniaceae.

It snowed all day and Genoa was in consequence very picturesque. The next morning at 7:40 I left for Pisa, reaching that ancient

Feb. 13, 1906

city at 1:45. It seemed as if about 2/3 the distance were through tunnels, the line following the broken coast, which gave a good setting to the numerous town and villages. Every bit of land was accounted for, the tops of bluffs being set with a garden altho it will nigh over-hung the sea. Then down into a flat country and on to Pisa. Stopped until 5:15, putting in the time in the town, with its fine old cathedral and great Campanile, famous to us as the Leaning Tower. The Leaning Tower looks exactly as it does in the picture in the old Wilson's Fifth Reader. I went up to the top by a circular stair which ascends

Pisa, Italy

within the wall like a tunnel, corkscrew-wise. The tower is pretty tall (179 ft. h.) and has such a decided tip (14 ft.) that I got nervous about going round to the off-side for fear I'd spill the blooming thing over. However it didn't topple and will be there a long time doubtless. The view from the top of it over the flat fertile country of the Arno with the Apennines rising in snowy majesty a few miles away gives one a fine idea of the whole country while a little to the west the Mediterranean shows clearly. For 60 miles nearly we had traveled this flat country next

Feb. 13, 1906.

the sea from which the mountains rose abruptly. It was dotted with towns and villages, everywhere the wonderfully beautiful bell-towers of the churches, square, slender, with a roundish open cupola on top and always full of soft colors. The towns were compact, some set on the mountain sides as if you were looking down on the world, or placed on the top of a hill in the most unlikely situation. Pisa itself is still a walled town, the wall 20-30 ft. high and in exceeding good order. The city is attractive to the eye in its general aspect, the green outside blinds of the windows making a most pleasing

Naples, Italy

effect against the yellow, gray white and red tones of the stone walls than you might suppose. I went on in the night to Rome, arriving there at midnight. The Eternal City! Oh, maybe! but the only impression I had was of a great number of railway tracks, sidings, curious looking Italian coaches and engine houses. How absurd to be trawling into Rome in a railway carriage – but more comfortable than in a war-chariot.

A most jolly German family occupied the same compartment with me and we laughed and talked at a great rate. Arrived at Naples at 7:00 this morning.

Feb. 14, 1906.

Naples is most beautifully situated the view from the Hotel Britolini being very fine. It is truly a bay, not a land-locked harbor and is inferior to San Francisco Bay decidedly, save for Vesuvius which always dominates the landscape and gives a great sense of mystery to the view.

Glasgow is a pretty rough town, especially on the water front of the Clyde; Genoa is a great sea-port; but Naples beats them all. It is the most populous city in the middle Mediterranean region and its population is brighter and more careless of public appearances and decency than any seaport I ever visited. Cabmen crack their

Naples, Italy

whips and harangue the stranger the moment he is within sight; street fakirs and the most disreputable of men throng its narrow streets, piazzas and corsos, accosting you on the slightest pretext or none whatsoever. The scum of all the countries of three continents bordering this vast inland sea settles in here. You walk the ~~ta~~ water front and the names of the home ports on the vessel's prows speak the most ancient of trading towns in Asia Minor, Greece and Sicily. The street scenes have the color of the near orient. The burden carts are not pushed by men as in the north but by diminutive donkeys. Immense

Feb. 14, 1906.

loads of wood or provisions are loaded ~~on~~ high on carts, primitive looking things with high wheels often, two timbers carrying the load and projecting in front as shafts over the donkey's body. How such huge loads are balanced so nicely is a marvel. An extra donkey or two may be put on the sides. Men handle building stones from ship to quay, barefoot. Women and men balance ~~of~~ burdens of all kind on their heads in the coolest manner: provisions, flowers, even baskets of eggs!

– The Freemans of Berkeley whom I came down from London to meet have arrived from New York by steamer. It seems as if I was never so glad in my life to see home faces.

Pompeii

= It was a beautiful day for Pompeii. We left Naples at 10.00 by train reaching the Pompeii stat at 11.10 where we lunched at the Hotel Suisse, 3 fr. The entrance to old Pompeii is 2 minutes walk away. One knows not how to express his sense of interest in the old city. It was far better preserved than I expected. The city is laid out in a very regular plan, with straight streets. The central point of the plan is the Forum - a spacious rectangle surrounded by the remains of columns and looked down upon by the Temple of Jupiter at the end. The streets are invariably paved with square blocks of stone

Feb. 17, 1906

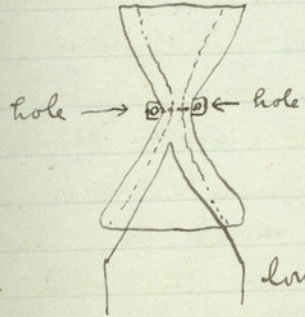
placed diagonally mostly or perhaps always. The sidewalks are well above the street pavement. The streets are mostly 6 or 7 ft wide not including the sidewalks. Of course there are some finer broader streets. The house walls along the street are mainly intact and ordinarily without apertures except doors for shops or residences. The fine residences with their central court with fountain, statues, garden, etc the colonnaded arcades surrounding it, and many rooms opening off it were highly interesting. The House of the Vetti is a remarkable example of a wealthy Pompeiians house. Things are in situ. Especially worthy of remembrance were

Pompeii

the frescoed walls. The paintings were in a remarkable state of preservation, some of the colors seeming as fresh as if laid on yesterday, while the figures, landscapes were faithfully and in a high degree artistically represented. Wonderful for its exquisite color and detail was a series of Cupids forming a low narrow frieze about the room: Cupids making wine, Cupids in a Chariot race, etc. See Baedeker for detail. The Kitchen showed the kettles and cooking utensils just as they had been left. Then there were the slaves quarters, dining-room, etc. In other houses we saw a

Feb. 17, 1906.

number of mills, the upper stone hour-glass shaped, the lower conic. These stones were all of the same pattern. The upper had a sort of aperture straight through the middle and a block like portion in relief at the end of the hole (the hole passing through it), another hole through the block at right angles to the main hole.



We also saw another mill—an olive mill. The base was a short

Pompei

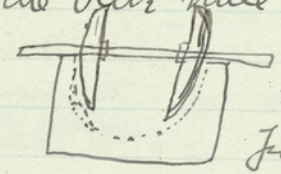
but thick cylinder like a meat block. In the top was a half-globe-like excavation. Two discs of a globe set upright on opposite sides of the hollow were held in position by a bar which passed straight through and extended on each side so as to form a handle for man power or rather two handles, one on each side. The House of Pansa was beautiful and tasteful and not too large for a young bride's house. The triangular Forum and a Doric Temple adjoined the Greek "Theatre". A large covered walk like a tunnel led through the walls around the highest tiers of seats. There were openings so that one might

Feb. 17, 1906.

step through to the tiers of seats. The covered passages and rooms behind and near the stage made a very complicated "business". I liked the gladitorial square and its surrounding buildings. Then there was a small theatre near at hand which had a most enticing look. Then we passed up a broad thoroughfare running straight through the city to the House of the Vettii, and then to the Museum, noting all manner of interesting things. Overhead was the spotless blue, flooded with warm sunshine, the snowy mountains sparkled, the great cone of Vesuvius lazily smoked, as if brooding over the city which it had once overthrown.

Pompei

Plan of the Olive Mill.



This is a passing sketch but gives the idea.

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Feb: 17, 1906.

That night we went on to Cava by slow train, to the Hotel Victoria. Fine rooms for 3 francs including light and service. Of course we tipped all around. Dinner 4 fr. including wine. Breakfast inc. preserves 1.25. An old Italian Lady who spoke English was a pleasant fat old lady. The concierge of the Hotel hired us a carriage to Sorrento and showed much knowledge of human nature in the bargaining. He thought of trying to make a separate bid down town but he had a boy posted at the stable to head us off! Cava has a wonderful narrow street 2/3 mile long with colonnaded buildings either side. On Sunday morning early it was crowded.

Capri, Italy

Our John cracked his whip and shouted to clear the way. We were objects of interest to a thousand pleasant eyes. The shops were open and each man was carrying on his trade in view of the street.

It is a glorious Italian day, blue skies, the blue Mediterranean, the snow-covered mountains bordering the Gulf of Salerno, the lemons and orange trees on the hills facing the sea – the Gulf of Salerno, blue as the bluest water, shimmering in the sunlight that floods all this wonderful world. This is one of the most remarkable days of my life. Driving all

Feb. 17, 1906.

day, following the stone road cut out of the sea cliffs, coming down into high-walled narrow streets of the villages and towns, filled with a strange population, carrying on their business and plying their trades in the open doors of their houses; farmers with burdened donkeys of produce going to market as in biblical times, women with large burdens on their heads, fisher folk, men walking barefoot up the stony road and carrying their sunday shoes on their back; towns climbing steeply up against the hills, the most charming one being Positano; lemons and sometimes orange trees filled

Amalfi, Italy

the terraced gardens of the abrupt hills, every foot terraced, the trees with flat tops and covered with brushy covering as a protection against frost; the lemons hanging thickly on the underside as we looked up at them from below; grapes trained up 15 ft. high on poles; men at the villages drying maccaroni on cloths on the ground, little star-shaped pieces with a hole in the centre, running over the whole with their bare feet. At Amalfi we had an elegant lunch (2.50) at the Hotel Marina Riviera, the best maccaroni I ever tasted! We went to see the Cathedral and its crypt.

Feb. 18, 1906.

All the way we were pursued by swarms of beggar children - mostly girls, often very pretty and with great animation and charming ways. They were certainly more insistent than elsewhere in Europe. Beyond Amalfi we reached a headland and had a fine view of the towns we had passed, the great curve of the bay, the snowy mts near at hand and in the far distance across the gulf billowy and crumpled. I have never seen a finer view of the kind, one more reductive one more restful. Next we had Positano climbing the hills from the sea which I want

Sorrento

to remember all my days and a little after! Then the road blocked by a landslide and 3 francs extra for a carriage the other side. Nor must I forget the Campaniles dizzy where nor the curious old castles on every headland of the sea! Then through the walnut groves to Sorrento where F. Marion Crawford lives. Put up at the Hotel Royal. Had beautiful rooms for 3 francs! Delicious lunches; eggs cooked in a way I never saw before as if soft-boiled inside and frittered in meal outside!

Longfellow's poem on Amalfi was printed in large type

Feb. 19, 1906.

and hung in the dining room of the Hotel at Amalfi.

At Sorrento we shopped; also went to call on Mr. Campiriani, the King of the place. Mr. Freeman wanted to talk walnut crop to him. He says the walnut shells are very tight, so that air cannot get in. The crop may therefore be sold the next year. Sulphuring does not hurt it; often they do not ordinarily sulphur. Borers are killing the trees somewhat. Their orchards are all mixed, the trees very close together and in no case with the regular trim appearance of the California orchards. He says it would be better if the

Naples

lemon trees were not protected from frost as the trees by the system practiced are rendered increasingly delicate instead of more hardy! About 3/4 the crop exported goes to America, one-fourth to England.

Met a party of "Berkeley" people here, Mr. & Mrs. Wright, Miss Anna Florence Brown of Oakland, Miss Moller, ds. - all U.C. We had a jolly time together back to Naples.

Naples is marvelously strange to occidental eyes; its narrow streets, often "gradi" where they go up a hill by steps, its shops for the people, its women carrying tall water-jars on their head, etc.

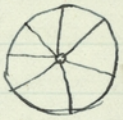
Feb. 20, 1906.

The National Museum contains the celebrated Farnese Bull, Farnese Venus, Adonis, Hercules, etc.

The collection of Pompeian remains is extensive: Foodstuffs: walnuts, chestnuts, filberts, wheat, barley, dates, figs ("Fichi Secchi") pine nuts ("Pinnochi"), Bread Fruit, Lenticchie, Fave. All were as black as charcoal, in fact were charcoal!, The Noci (English walnuts) were thus prized in Pompeii 1850 years ago. How absurd to call them English walnuts, all the more in that they do not grow near England. The dates, chestnuts, everything in fact were very natural in appearance - no mistaking their identity. The Bread Fruit tree we noticed as

Naples

very common on the Amalfi drive, with its pluri-pinnate leaves and thickish orbicular leaflets. The fruits were labeled "Garrube" in the museum, the chestnuts "Castagne". There was a large quantity of bread; the favorite loaf seemed to be someting of the size and shape of a low mandarin's chinese cap, a "button" in the centre and creases running to the outside, so:-



but regular, not irregular as shown in my rough sketch.

In spite of the monstrously vexatious annoyances of the cabmen, fakirs, etc. for you cannot walk ten steps without being ac-

Feb. 20, 1906.

costed, Naples is still alluring. A sight of a peasant woman with a tale water jar on her head has such a flavor of ancient times that you gaze in rapture.

Went to Rome. Mrs. F. was so disgusted with the Pension Hayden that we left the same night to the great disgust of the Hayden people and went to the Hotel Savoy. We had much merriment over this, as it was near mid-night.

Rome was almost disappointing at first. I expected to see too much of ancient Rome. The city of the Caesars is buried 15 or 25 feet beneath the present city and time, barbarous in-

Rome

raders, and most of all the mediaval and latterday residents have played havoc with the ancient structures. As an example: The Coliseum with its covering of marble was used as a gigantic quarry to build the later city of Rome, private houses, etc. It is a marvel, rather, that that structure is so complete to day. The most perfect of the ancient buildings is the Pantheon - but it has been denuded of its valuable covering. The Forum is still highly attractive but one must use the imagination freely. The Arch of Constantine is a wonderful structure; so that of Septimius Severus; but that of Titus is

Feb. 21, 1906.

not wholly ancient. The column of Marcus Aurelius is a fine thing but like everything else, the popes have "sanctified" it; it is now crowned with a statue of St. Peter. Trajan's column is similarly in good preservation. of Pagan Rome

St. Peters Church is majestic and imposing beyond any church on earth. It is larger than any other. Its great dome is marvelous. Everything is on a gigantic scale. But it is not so beautiful to me as York Minster or even some smaller churches. For luxury and beauty combined it does not equal the Maggiore in Rome which is the richest church I ever saw

Rome, Italy

My impressions at St. Peters were of a different character. I sensed the power of the Church of Rome and its tremendous machinery. It is undoubtedly the greatest of human institutions in number of people which it controls combined under a highly Effective and systematic organization. More than any other Christian Church the Catholic Church plays upon certain desires dwelling within the breast of every man. Its exterior trappings, rituals services, are merely developments from pagan forms. Pagan temples were christianized. Nearly ever Roman work in

Feb. 22, 1906

Rome has the tablet of some Pope on it. The Colosseum, the Arch of Titus, etc. The Columnn of Marcus Aurelius is now crowned with a statue of St. Peter. The transition to Christianity was thus made easy, or easier for many "pagans" I saw a service in one of the chapels at St. Peter. There were 60 or 70 priests going through the chants and forms. I was intensely interested in their faces. They were all very different but all might be described as Jesuitical. They seemed to me the very incarnation of all that has been written of the Church of Rome in an unfriendly tone.

Rome, Italy

I went to the Borghese Gallery and marked in my Baedeker the most important things. The reclining figure of Pauline Bmaparte is an admirable statue. I admired vastly Domenchino's Cumean Sibyl. Its colors were very rich. Michael Angelo's Moses in the Church of St. Pietro in Vincolo made a strong impression on my mind. Scarcely got more than an impression of the Vatican collections and nearly broke my ~~very~~ neck in the Sistine Chapel without getting much notion of it.

Feb. 22, 1906.

- The days in Rome were all too short, of course, and we went on to Florence with great reluctance.

Florence

– We had a beautiful days ride from Rome to Florence, the walled towns crowning the hills, "like a town set on a hill," the peasants working in the fields (we saw 100-acre fields being spaded by hand!), mulberry trees for silkworms, tall poplar-like trees pollarded every year, the pollarding being from the short branches scattered along the main stem so that the effect is very peculiar

70 or so ft high.

No wood is wasted in Italy. The kindling brought into the room

Feb. 28, 1905

at Savoy Hotel, Rome, consisted of bound bundles of roots and twigs. Cart loads of "wood" in the streets of Rome consisted of such stuff as would be burned in a California orchard. No fences between the farms. Laborers get 15 to 30 ~~few~~ cents a day. The live on a few things. As in Bible times they live on "bread and wine". The typical loaf is large and round with a great hole in the centre. They put ~~it over~~ their arm through it and carry it or slip it over a stake on the cart.

Florence!, Mother of Arts. Sculpture, Architecture, Painting and Poetry. Its wealth of treasures confound the senses.

Florence

I should rather "loaf" here than in any other city where I have been as a traveler. It is lazy yet very interesting. The street-life is good to watch and one can poke about its narrow ways peering into all kinds of shops where all sort of things are being done. Loaves of many curious shapes hang over the door in a string. A man buys a loaf and takes it home. That is his dinner. Goldsmiths, silver-smith, wood-carvers, cabinet makers - all busy, their products shown in the window of the shop. The whole stock is there. A street vendor sells fabas beans - he heaps a soldi's

March 1, 1905

worth into the customer's palm or spoons them into his pocket. Another cries "Geel a maiday leep. Leep! Leep" as near as I could get it which is not very near. Miss Morris guessed: Who will buy! Who will buy! or "Who is next!" A boy sits on the pavement weaving rushes into the bottom of a chair. On the way to the Belli Arti a chair-weaver with a load of rushes cried for custom - a long rich resonant powerful cry - it was more like Grand Opera than dirty narrow streets. Everywhere about here the women wear straw for hats. When not doing

Florence

other work their fingers are going with marvelous rapidity. Beautiful hats for girls and women we bought at Fiesole for 2 & 2.50 lira. At Certosa we went through the monastery. It was a great institution with many chapels, corridors, rooms, cells. Everywhere it was most richly decorated. The numerous paintings seemed everywhere of a very high order of merit. Many of them were made by famous Florentine artists. Richly carved doors, mosaics, stone-work, a central garden with a well from which we

March 1, 1905.

pulled up a drink. We asked the monk to drink with us. He smiled and shook his head. We laughed - they drink only wine in Italy. The views were magnificent from the walls of the monastery. It gives one a great sense of the tremendous importance of the church in those days. It was everything. It commanded everything. It drew to itself everything. It was the whole thing. All the interests of the people centred in the church - or at least more than anything. Cut out from our modern lives all modern interests - let us live to make beautiful buildings, beautiful

pictures, beautiful statues – from everything in this direction – one may here imagine what we might achieve. It is a pretty walk down to the city. One gets a fine view of Florence – the Palazzo Vecchi and its tall tower, the Campanile, the Duomo – the latter rising hugely as if it filled the valley. It certainly seemed more vast to me when from the streets of the city.

Fiesole is a nice place to visit. We drove in through the narrow hill ways. – houses arching over the street, everywhere the wayside cruciks, the red sunset glow through

the trees. Miss Morris and Miss Boone came out with us:- they are training their voices for opera work and are now learning dramatic action. Miss Morris must learn thoroughly the leading role in twelve opears before making her debut.

Florence has many interesting shops: Coppini Brothers, 6 Borgo San Jacopo near the Ponte Vecchio; Lottie, wood carvers and dealers in manufactured wood products, tables, chests, chairs, Via Guicciardini on the way to the Pitti Gallery. Bacci is an interesting old furniture dealer. On the north

side of the Duomo is a store for leather goods especially in stamped binding and boxes. Very interesting. They gave the Freemans 10 p% discount.

I enjoyed tremendously the Uffizi Gallery. And the Pitti came the next day. Of all galleries I want most to go back to the Pitti. So many many things that one has seen in prints all his life are there. I marked many of them in my Baedeker. I referred to my guide so many times in the streets that Miss Brown (a sister of Everett Brown, traveling with her cousin Miss Moller) called it the Sibylline Book.

In front of the Uffizi is a court - a rectangle open to the sky with the famous men of Florence represented by a series of statues on three sides of it: Dante, Galileo, Savanorola, Botticelli, Andrea del Sarto, Michelangelo, Brunelleschi, Alberti, Ghiberti, Donatello, Benvenuto Cellini, Caeselpino and Micheli, the latter two botanists, Amerigo Vespucci, Leonardo da Vinci, Perugino. - a sort of hall of fame.

We had a celebration one evening - the Freemans invited the Berkeley people to an

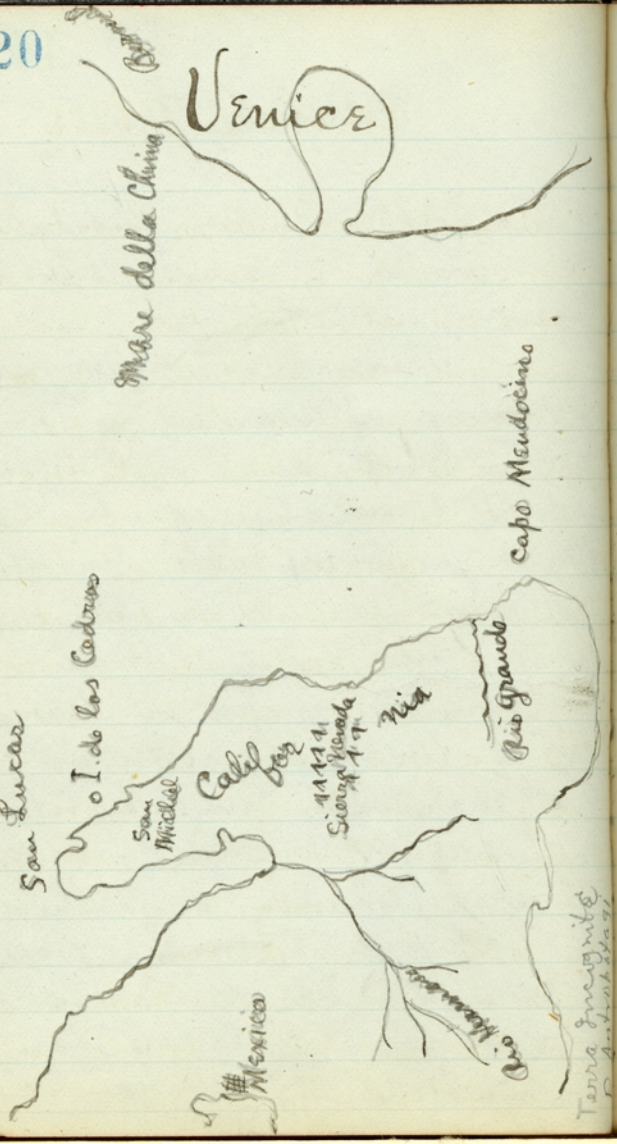
Florence

Italian restaurant called the Cave. It is frequented by artists. It is a cellar or rather basement, the great arches plastered over with the posters of the day. We had Italian dishes and a very jolly time. Present: Mr. & Mrs. A. G. Freeman, Miss Anna Brown, U.C., Miss Moller, U.C., Mrs. Dr. F. H. Payne, Berkeley, Dr. Payne her nephew, Berkeley; Miss Morris and Mrs Morris and their friend Miss Boone not Californian. To please the Freemans I recited "Caesar at the Telephone", "The woman who wrote from the Press" and "Em and Sue". The whole

March 6, 1906

crowd took to 'em mightily but I dislike very much to do that sort of thing.

Then we went away from Florence. I never left a city where I was a mere traveler with so much regret. The train pulls up over the Apennines and we reached a pass where snow was lying. We had some fine views. Grapes are trained up on low trees with four to seven short umbel like arms pruned off mostly very stubby or with one shoot left on each. Grapevines 1 to 3 to each tree. The olive. The mulberry for silkworms — These trees



March 7, 1906

"Orientales Indias hac tabula expressas peregrinationibus et scriptis illustrarunt enarratisq. Indorum moribus et institutis rem Mercatorium adiuvere Saeculo XV. Nicolaus de Comitibus edito Itinerario Lusitane postmodum verso novam lucem Nautis allaturo. Saeculo XVI Caesar de Fredericis Sinis insuper et Japonensibus ex aliena fide memoratis. Mercatorum ope Gaspar Balbus Gemmarius atque iterata navigatione Aloysius Roncinotus. Denique Nicolaus Manucius in aula Mogoli Regis diutissime versatus omnigenam earum Regionum historiam Saeculo XVII conscripsit quae in Bibliotheca D. Marci servatur"

Venice

We ran on a "mole" some distance to reach Venice. It is a queer sensation coming into Marco Polo's town. You come out of the railway station and instead of taking a cab you take a gondola and go to your hotel with your luggage. We went to the Hotel de Rome, pens. 10½ a day.

The Church of Saint Mark or San Marco is a splendid example of what Venice once was and a standing proof of its trade relations with the East. It looks like a Turkish Mosque It is Byzantine in short. Next to the Ducal Palace. The thing of greatest interest

March 8, 1906

here to us was the map room. The Venetians were traders and navigators. They were thus map-makers — the earliest and best. They have preserved here a circular map of the world made by Fra Mauro, 1457-59, a quaint-looking old chap whose bust stands alongside. It is a highly interesting thing — the map — the world ends at the bounds of the circle. Then there is a map of the "Far East" including California, which I roughly sketch 3 pp back and the legend of which I copy in full, vide 2 pp. back. Also crossed the Bridge of Sighs. Had a good view of the Piazza

Venice, Italy.

went to Murano to see the glass industry - in a gondola - the waters of the lagoons lying smooth and shimmery in the sun, a slight haze, a warm day, the towns rising out of the water, while flocks of water-fowl rest on the water. Lace manufactories galore. We were constantly greeted with: "You like to see the lace-making. 150 girls make the lace!" In its trade aspects Venice is a cheap circus town. Its narrow streets are lined with callers for each store who accost you every time you go by. If you make a purchase

March 9, 1906.

of 30 centimes postal picture cards they smile and bow each time you pass thereafter. The idea of the "Midway Plaisance" in our faire in the U.S. is taken from a town with strong Oriental features like Venice. You "trade", i.e. bargain for everything. But its canals are a delight. We went to the Teatro Rossini and heard Il Trovatore with a corp of splendid voices and a fine orchestra of 50 pieces. It was glorious. I can't say too much for the stars or the chorous. Everyone pays 1.50 L. to get in. Then you stand or buy an orchestra seat or a box. We

Venice, Italy.

bought a box for 4:00 L. We paid 2 francs (inc. tip) each way for the gondola. Therefore for three of us the Opera cost 12:50 L. Exceedingly cheap! We might have walked to the theatre but it was a rare sensation going up to the theatre step in a gondola and going home with the full moon in the high sky, the tall white palaces rising out of the water and the boatmens cry at the corners. The Rialto Bridge with its shops and its fruit, fish and meat markets beyond we visited. all sorts of maccarni, cheese, figs

March 9, 1906.

oranges, finochi, onions, cauliflower, cabbages, dates.

Visited the Academia di Belli Arti but was not much impressed, altho the time was too short At St. Marks I heard a priest preach. Altho I understood no word that he said it was a pleasure to listen to him on account of his earnest incisive convincing speech, most clearly and dispassionately delivered. In the cathedral at Milan I heard a priest; his appeal was to the emotions and he was plainly of inferior intellectual stature.

Went in to Padua on Sunday March 12. It is a quaint old town with colonnaded pavements nearly everywhere. I was most interested in the Botanic Garden which is the oldest in Europe. Italy has a great many botanic garden. Each Kingdom or province before the days of unification thought it must have a botanic garden. I felt humiliated at not

Padua, Italy

being able to speak French; as for Italian I could neither read nor speak it but that was not to be expected. Had some difficulty in getting into the place; Saccardo for some reason was not to be had; but "Dott. G. B. Traverso, Libero Docente di Botanica, Assistente nell'Istituto Botanico della R. Università, Padova" was very kind and showed me the garden and collections. They have some very old trees. The Goethe Palm (Chamaerops humilis) has numerous branches and is far from "humilis" being 30 ft. tall as I remember. The oldest tree in the garden is a Vitex Agnus-Castus

March 12, 1906.

from 1550. It is interesting that most of the trees have on the label the date of planting. They had a very good specimen 35 or 40 ft. h. of Cupressus Macnabiana. Their Norfolk Island Pine was housed in the range of greenhouses. As it grew they built an ocatagonal tower for it which is now 50 or more ft. high. It is a fine tree but indicates that the climate of Pisa is severer than California at the same altitude. I told Doctor Traverso that they would have a Pisa Campanile by and by. The lecture-room was quaint, ancient, ancient. The seats

Padua, Italy

rose rapidly but you couldn't see them from below. It was like 4 tiers of elevated pews of the old fashioned kind. There was a long sloping desk or board in front of the bench for writing. Most other things, library, herbarium, collections, had the look of having been started long ago. The University buildings proper are in the heart of the town with the busy running between them. The court of the main building has its walls fairly covered with the armorial bearings of famous students. These shields are placed on the walls in fairly

March 12, 1906.

regular rows. They give a sense of great antiquity to the court. Still more the Sala Magna or state hall of the University. It is, too, covered with arms in the same way. Among others I noticed Tasso and Copernicus. A statue of Galileo who, like Copernicus, was a professor here stands on one side of the hall. It has a touch of realism in that there is a wart on the left cheek. The fruit and flower market occupies one piazza near; the vegetable market another. These were interesting and were mainly tended by women who often knitted vigorously when not

Milan

attending to costumers. I had a good clean room at the Albergo del Paradiso and in my efforts to order a dinner got acquainted with a Frenchman who spoke a little english. Jacques Deplech, Ingenieur Diplômé E. P. C., Chemist at the fabrik of artificial silk.

Milan is a bustling bustling commercial manufacturing town the most go-ahead in Italy. The Gothic cathedral is a wonderful thing and is tremendously ornate. The amount of carving in stone is something appalling. This is everywhere, all over the blessed thing. Numerous slender highly carved spires run up capped by a statue. I wondered what kept them

March 13, 1906.

from being blown over in a storm. Wandered on the roof for two hours. Splendid view of the long crescent of the Alps rising from the fertile Lombardy plain level as a floor and highly tilled and of great extent. The snowy chain shows Monte Rosa, the Matterhorn and is one of the finest views of its kind I ever saw.

Lake Como.

We left Bellagio at 10.45 and steamed directly across the lake to Menaggio and there took the mountain railway for Lake Lugano which gave us splendid views of the luxuriant shores of Como, its towns and villages, its two arms and Bellagio sitting haffily at the foot of its wooded hills. Chestnut, walnut and mulberry trees clothed the rugged slopes while near the shore the tall slender outlines of the "funeral cypress" punctuated the landscape. At the head of the lake we took steamer to Lugano town which is guarded by high abrupt hills and is well

March 16, 1906.

situated altho I think Como the more beautiful.

At Bellagio we stopped at Hotel Florence. I took a walk to San Giovanni Bellagio early in the morning and had a fine view of the other arm of the Lake (which is shaped like a Y) its narrow length with its foothills crossing their feet in the perspective and nearer rising abruptly from the water. There is, in the way, a fine avenue of cypresses with an old tower at the foot. I saw a funeral procession pass along - all on foot, including the bearers, priests, boys in church robes, women in white headdress

Lugano

carrying candles; others also carrying candles, the women chanting, the boys chanting, the voice of the priest rising above the others at intervals. I saw a young man, with the typical burden basket of the region something like that, carrying basket load of manure into a vineyard on his back. It is typical, such an incident, of the cheapness of labor. I saw a tower built above an arch over a road and many such interesting things. There is no waste of land space by scattering buildings. Away off on Lugano Lake the towns or villages were

March 17, 1906

exceedingly compact masses, sharply defined all around.

We were round across the Como lake to the villa Carlotta where we saw Canova's statues, Cupid and Psyche, and Also friezes by Thorwaldsen. The garden was shown us quite thoroughly - a fine collection of trees, mostly such as we grow in the open in Calif. They had a Sequoia gig. 40 ft. h. The gardener called it Wellingtonia. Fine Rhododendros, Azales, Aucuba Japonica, a fine Cryptomeria elegans - the garden form.

Stopped at Lugano. Splendid view up the lake and of the fine mountains set around the town. (St. Gothard

See ahead 5 pp.

Zurich to Basle

- went to the Botanic Garden in Zurich. Dr. Schinz was not in but a "diener" showed me about. He was either embarrassed or ungracious for he took no pains to speak distinctly. However I have often heard that the Germans will not take pains in this matter as do the French. I was shown the lecture-room, herbarium (the bundles in open pigeon-holes) and the greenhouses. In the garden are good busts of A.P. DeCandolle, Zollinger (with an Artocarpus branch in relief on the pedestal to commemorate his work in Java), Conrad Gesner in the

Mar. 20, 1906

quaint dress of the period; and Heer. Zurich is an interesting city historically. Its new quarter is however very modern — fine business blocks wide streets and pavements, like the best parts of Los Angeles.

At Basle I had time to see the Museum with its picture gallery and the collection of Holbein drawings. Also went to the Botanic Institute and Garden. Dr. Senn was very hospitable and showed me over the building. They have the Bauhin Herbarium, done up in old leather volumes. Their Herbarium is small; the

Basle

bundles are in open pigeon holes. They have a scheme for storing maps of small size, a modification of the drawer system. An end piece or lid lets down, exposing the pigeon-hole which is filled by a drawer with an open end so that any map may be pulled directly out. The bottom of the drawer has cut out two (or 3?) handpulls. The garden is small but is closely cultivated and the greenhouse utilities are many. The collection of plants is fine and varied. I here saw Psilotum for the first time. It was "flowering" the carpogonium globose,

Mar. 21, 1906.

scattered along the slender leafy branches. They also had a very curious Aroid with a tall slender strict flower stalk and a great bulbous base. Senn is well acquainted with Duggar, and McKenny of California with whom he studied in Germany.

Stopped at the Hotel Bauer, with veranda overhanging the Rhine. My room looked out directly on the broad heaving bosom of the river; a very beautiful outlook. Took a look at the outside of the Munster and then train for the Rhine Falls where I viewed the falls for an hour or over

Schaffhausen, Mar. 21, 1905 to

and then went on to Schaffhausen for the night.

[St. Gothard – over the alps. See 5th pf. back. Crowded out. I write it here. Had a magnificent day, absolutely cloudless and saw the alps in all their glory. The ascent on the Italian side is accomplished in a different place by a couple of spiral tunnels. Similar engineering on the Swiss side. The houses mainly of wood – mountaineers huts – a marked change from Italy. Fine gorges. Plenty of snow. But the treat of the day was perhaps the steamer journey down the enchantingly beautiful Lake Lucerne-

Stuttgart, Mar. 22, 1906.

the continuous change of views, the windings of the lake, the Swiss mountaineers in their showily embroidered Sunday coats and finally at the town end of the lake a view of the Jungfrau and Eiger. Mt. Pilatus stands gaunt over Lucerne town – a town of hotels. The Rigi is obviously a splendid vantage point. I changed my mind and determined to go to the top but the next day it snowed (Monday) and Tuesday it snowed more and I went on to Zurich and in the evening to Bale.)

Lucerne! Mar. 18, 1906.

Schaffhausen to

The Rhine Falls are at Neu-hausen. The Guide-book says they are the largest in Europe. I tried hard to appreciate them but not very successfully. Not nearly so picturesque as the Yosemite Falls and not to be compared with either the Nevada or Vernal. Too much like a cataract; too little like a true fall - but quite huge after all.

Schaffhausen is a grand old town. I saw but little of it. Slept there the night. The Minster tower long held the bell which inspired Schiller's Lied von der Glocke and which is now kept in the cloisters.

Stuttgart, Mar. 22, '06

On the way to Stuttgart crossed and recrossed the Danube which is here a small stream. Passed numerous German villages. The houses are big, rather barn-like, often much decorated on the outside, often with wood beams alternating with panels of stucco, etc. "Stratford-like". These towns looked very clean and orderly. Passed through the edges of the Black Forest. The country here is much wooded altho I saw nothing that looked like old forests. The forests were all tended. Clean fellings showed patches of young spruce, etc., the young trees in regular rows like a vegetable garden.

Stuttgart

Logs were laid out very regularly, being peeled of their bark. They were 40 to 70 ft. long, I should judge, and 1 to 1 3/4 ft. through at the butt. They were loaded on ordinary wagons to be taken to the railway station. By rail a truck was put under the fore part and a 2-wheeled truck under the rear part of the bundle of logs, so to speak. The logs served as the "coupler" between the part of the train ahead and that behind.

Stuttgart is a large place. I visited the Museum of art, the Industrial Museum (which is in a fine large building) and the Natural History Museum.

March 23, 1906

The latter had a large and very complete collection of birds and mammals, etc but the display of them does not in the least compare with the Natural History Museum at South Kensington. There is a botanical section: economic but systematically arranged by natural families. I noticed a rosary from Lake Maggiore made from buds of Eucalyptus globulus, the "beads" strung together by wire.

Visited also the Schiller Monument, the Stifts-Kirche, and Joannes-Kirche, the latter a beautiful gothic structure.

Nürnberg

Came here last night from Stuttgard – 4 hrs. Nurnberg is certainly an interesting old city and while the central part is ancient, there are many fine new buildings, broad streets and a general air of prosperity and go-ahead-ness. The old walls and picturesque towers, gates still surround the old town for the most part intact, and it is the policy to have all new buildings within the walls conform to the old plan or rather style of architecture. I followed the walls nearly around the whole city. The river divides the city into two parts, the St. Sebaldus side and the side.

March 24, 1906.

On the St. Sebaldus side of the town is the row of weavers Houses, 7 in a row, each house separate, the row standing in a broad street as it were. On the first house is the following legend:

Der Linnen Weberei zu frommen
Liesz weber man von Augsburg kommen.

There is a fresco of St. Sebaldus, patron saint of Nurnberg; fresco of the pilgrimage of the weavers: Then follows:

"Am Schwalenberg auf Felsengrund
Stehn sieben Zeilen bis zur Stund
Got sei der Fels vn Deutscher Land
Und schutz uns mit all'macht'ger Hand.

Nürnberg

On the St. Sebaldus side also is the Frauenkirche with its ancient clock. At noon the seven electors come out and pass around in front of the seated figure of Charlemagne. The figures turn and face Charlemagne as successively they come in front of him, turn again and go on. Charlemagne shakes his kingly wand to each wand. The attendant standing figures at the side of Charlemagne, or rather at the sides of the clock, make a feeble attempt to raise their long horns as straight bugle-like pipes, and blow them rather feebly as well. The procession passes in front of Charlemagne three times, then stops. I expected them to go in and the doors to close again but they remained standing there, probably until 1 o'clock. The market place is in the square in front of the church, i.e., the vegetable market. Back of the church is the fruit market and also the statue of the gooseman which perhaps has a popular favor like the manikin at Brussels.

March 24, 1906

The St. Sebaldus church is celebrated for its Brides Door and various carvings. It is now undergoing restoration inside. The Church has some good stained glass windows and

Nürnberg

a very fine rose-window. The attentions shown you by hotel people to put you under obligation for gratuities is remarkable. I went to a simple hotel: the Nurnberger Hof. The second night I left the Gast-Zimmer at about 9:30 to go up to bed. The head waiter send "Good night" and a boy preceded me up three flights of stairs, opened the door, turned on the light, said "Good Night" and closed the door. Nothing but that a self-reliant American would have done for himself without thinking of it. It makes a Californian feel as if he were a helpless imbecile.

March 25, 1906.

Came to Berlin by way of Hof and Leipzig. The German fields are not enclosed and the farmers live in villages, going from the village into the field to work. The whole country is rolling as semi-mountains with flat valleys here and there, sometimes, plains of considerable extent. We passed through considerable forests on the way, especially between Hof and Leipzig. Near Leipzig the country becomes flat as flatter and so on to Berlin. We crossed the river which was about the last thing to be seen in the gathering dusk.

Konigliches Bot. Mus. Berlin

F. Pax, Aceraceae, Pflanzenreich.

Acer. divided into 13 sections. W.Dm.=

A. Fls. app. with leaves or slightly earlier. disk well-developed; interior bud scales elongating.

a. Sepals free; petals evolute.

Sect. I Spicata. A. macrophyllum.

Sect II. Palmata. A. circinatum.

Sect VII. Glabra. A. glabrum.

b. Sepals connate; petals none.

Sect. XIII. Saccharina. A. grandidentatum Nutt.

B. Fls. appearing long before the leaves; disk much reduced; inner bud scales not elongating.

Sect. VII. Negunda. A. Californicum. Dietr

= A. macrophyllum Pursh. var. imbricatum OK. twigs erect,

April 2, 1906

partly imbricated.

= A. circinatum Pursh. twigs horizontal.

= A. Californicum Dietr (Neg. Calif T.+G.)

Pax separates this from A. Negundo as follows:

A. Negundo, adult leaves below glabrous or pilose; young branches most often glabrous, pruinose; style hidden.

A. Californicum, adult leaves densely pubescent below; young branches pubescent (densely cinerous); style not parted wholly to the base. (Test out above; I am skeptical.)

= A. grandidentatum. Rocky Mts. Does it come into Oregon? Sargent refers it as a var. of barbatum, Sudworth of saccharum.

= A. glabrum Torr. Two vars: var. monophyllum Graf vm Schwerin, which is the var. typicum. and var. tripartitum (Nutt.) Pax. He (Pax) makes the

Konig. Bot. Mus. Berlin

earliest leaves (of the shoot?) lobed, later deeply parted, the latest ternate. Of this I am skeptical but look up.

The geographical distribution of the "sections" is shown on a fine chart. Spicata (macrophyllum) is the only one of world-wide distrib. i.e. in those parts of the earth where maples grow, mainly north. hemis. Palmata (circinatum) is represented in western Am. and in the China-Japan region.

- Ball, J., "Her Boreali-Americanum, 1884. Ex regione collina Californiae occidentalis. Redwood Forest, Santa Cruz. Ceanothus papillosus" - Label in Berlin Hb. Also Calavaras Big Trees.

Hillebrand, collected in Calif. 1863. Silver nut. Sierra Nevada. (Ceanothus parviflorus)

April 3, 1905.

=Miss Janet Perkins, Ph.D., says: "Engler is a very hard worker. He is about 60 yrs old. He does a prodigious amount of work. He has the skill to lay out work for others and inspire them to do it. Naturally he is very jealous of his time. He regards every minute as precious. I do not suppose he is particularly "good company": Men who are bundles of concentrated energy like that are not usually. He does laugh often. But when he does he has the merriest twinkle in his blue eyes. One day a man of some importance came to see him. He waited in a room next to Englers office. Insisted on seeing Engler, saying: I ~~know~~ have heard that he can be very disagreeable with those who

Berlin, Germany

take up his time, but I must see him". Engler chanced to overhear him and nearly doubled up with laughter. He appreciated that. At Vienna he didn't say much but when there was a proposition to delay he vigorously pointed out that they had left their work and assembled from all parts of the world and that they must act now. Coville arrived a day late and had the hardihood to get up and say that his steamer was late and would they not reconsider all that had been done yesterday. This seems inconceivable but it was gravely translated into French and German, the question put and voted down. After three days the Coville-Britton crowd

April 4, 1906.

attempted to get things changed that had been done the first day! This astonished the French delegates. "Why Sir, said they. Why we never heard of such a thing. They had no acquaintance with practical American politics but they learned. The Rochester-Code men said: "I will do so and so if you'll do so and so!" This sort of trading is quite foreign to the people here who have no idea of doing anything for Botany except that it be right to do it.

Engler touches nothing, takes up nothing but that he gives some new idea or suggestion, so that while he writes a great deal there is always something of value

Berlin, Germany

in everything he puts forth. He works more than anybody else here; he lectures; he runs the Botanical Museum and Garden; he does heaps of research work. With all he is the simplest of men; I think all truly great men are simple, modest, unpretending – know little of the world and of business – and are not "men among men" – men of the world" — All of which is the gist of what was said me by Fraulein Docteur Perkins of Berlin.

– Hillebrand, his Calif. collections seem to be chiefly from Mariposa Co and Oakland, 1863. wholly?

April 5, 1906.

– Perkins, Mrs. Jane Rose, collected about 120 plants at Soda Springs Placer Co., 2000 m. alt., July-Aug, '87. det. Prof. Greene. In Herb. Berlin.

– Ball, J. see 5 pp. back. Also Silver Mountain

Berlin Herb.

– Ceanothus thyrsiflorus Eschscholtz. Type: "San Francisco. Novae Californiae. Ad v Chamisso." in a copper-plate hand on the label, doubtless Chamisso's hand. No. = 567. Typical spm. of thyrsiflorus with shiny veins beneath straight branchlets + Spm. was taken (spartium-like nerves) in early flower.

Berlin, Germany

- went to a meeting of the at the University of Berlin. An ordinary gathering but composed of extraordinary men: Schwendener, stoutish and rather short, white hair, somewhat Quaker-like face; Ascherson, shorter still but chubby like a baby, now quite advanced in years, his eyes peering kindly between the full folds of his cheek and eyebrows; Magnus, looking like the pictures we have of him; Kny, sparer; Harms, Diels of the younger set; Koehne, the shrub and tree man; Dammer; Pilger; Loesener;

April 6, 1906

- A week later went to the meeting in the lecture hall of the Pharmaceutical Institute, of the Society of Botanists of the Province of Brandenburg. Here the gave a lecture on the Amazon and his explorations there, illustrated by a long series of fine lantern slides. Here I saw Ascherson again, Urban, Fedde, and many others. After the meeting they foregathered for supper, as is their custom, at the Schoss Restaurant. This is in the neighborhood of the new Botanic Garden. Hieronymus was present at the meeting. He has a kindly eye, full shortish beard sprinkled with gray, a high but comprehensive forehead with a small wen on one temple. Linden presided.

Berlin, Germany

Berlin Sights

- Women large, tall, sturdy, strong, rosy, standing behind meat blocks in the meat shops carving meat for customers. – Amazons of the shops.
- Automatic stamp and post-card machines for sale of postage, etc, in front of the post offices. Why shouldn't we have them in Berkeley?
- Paved places for watering street cars at hydrants. Should have em in Berkeley!
- A botanical woman artist in the Herb. asked Miss Janet Perkins if I were not an Indian or at least with Indian blood! This was no mean compliment, I understand,

April 10, 1906

for the Germans think the Indian very fine and marvel at his courage, steadfastness and endurance.

- Chamisso, A. von. Collected Heteromeles arbutifolia at S.F.. A short account of his collecting at San Francisco is in Linnaea, Vol. I.

Berlin, Germany

– Nearly every Berkeley traveler that had been in Europe told me that I could live more cheaply in Europe than at home. I have had nine months experience in several countries and nowhere do I find the living as cheap except in Italy. Germany and England are dear. I am paying $40 ℳ per month for board which at Berkeley I could get for $25 or $30 ℳ. Moreover there are any number of things you don't get here or are limited in quantity. Think of getting just two towels per week! And in every other way you run against their marvelous economies. Another thing: I thought fast eating was

April 10, 1906.

a reproach of Americans! In every European country that I have been in, I have found the most rapid eating. In the Italian first-class hotels one had to hold on to his plate. You turn your head to speak to your friend and instantly a waiter seizes your plate and bears it off. They stand around like hawks waiting to swoop down the moment you stop; generally they swoop before you stop. Here in Germany it is the same. I am passionately fond of fruit or fruit-sauce. Today the servant or tiecke-mädchen filched a half-eaten plate of berries from under my nose. I wouldn't have believed the feat possible.

Berlin, Germany

- The afternoon being pleasant Diels invited me to go on a walk to Grunewald. He pointed out the most interesting plant formations, as we walked along the little glacial lakes of this region. The woods are planted woods but the swamps are original and are separating lakes or encroaching upon them. We passed through the court of the Jägd-Schloss-or Emperors hunting lodge; deer horns of deer killed by the Emperor and bearing the royal crest, adorn the walls of the court. We went on to a characteristic German resort - where Diels said laughingly: "You will now excuse me if I take a

April, 10, 1906.

drink"! We had some very good Munich bier. Diels remarked that the consumption of liquor is distinctly declining, i.e., it is not so universal. In a company of officers or students, it is not unusual for one to see someone who refuses to drink beer. Ten years ago such a thing was unheard of; it would have been impossible. The Bavarians make the best beer. The Bavarians are the least intellectual of the Germans. Nürnberg is in Bavaria but is not "Bavarian" except politically.

Diels did the ferns for the Natürlichen Pflanzen-familien; has worked the Ammaceae; determined collections of Chinese plants; African plants; collected two years in Australia

Berlin, Germany

and was also in South Africa, is a hard worker, a good lecturer; gives Engler's course to graduates in Latter's absence; also gives another course (3 times a week); is an agreeable conversationalist, is witty, is an all-round capable fellow.

Returning we took in the new Botanic Garden. Its Pflanzen-Geographie Anlage is very interesting. They have an amazing number of species - 8 or 9000 I understood Diels to say. Europe, the northern slopes and southern slopes of the Alps, the Mediterranean region, Himalayas, South Africa, America, etc. It is strictly a botanic garden and not a pleasure park as is New

April 11, 1906.

in part. Diels has a depression on the temple side rather like the one in the centre of Sir Dietrich Brandis' forehead. He told me something of his work on the relation of the shape of the upper leaves on their development to fruiting: Marsilia quadrifolia, has at first one blade, then notched, then 3-notched, then 4-leaflets. I think he said 2 or 3 leaflets is necessary. But he found a fruiting state in Australia which had only narrow single leaves; i.e. fruiting had not waited for the type of leaves which signaled the appearance of buds. He has also worked

= Von einem Streiche fällt keine Eiche. - Deutscher Sprichwort.

Berlin, Germany

on Limosella aquatica and many other plants. His paper appears in June.

Cheiranthus Californicus C.&S.
Type label in Chamisso's hand. "ad portum San Francisci Novae Californiae legit" // 3 "scapi". Leaves narrow and long, 3 mm wide or less, as much as 6 or 9 cm. long inc. petiole, the petiole often longer than blade. Fls. 1 cm. long, petals 1.7 cm. long. Leaves with short appressed hairs. Calyx minutely strigose. Gray has written on the sheet "Est C. asper Cham. + S. in Linnaea, i. p. 14. Pod (very young) densely clothed with short straight
— foot next p.

April 11, 1906.

- My German conversational instructor, a quick-witted observing little old lady of 65 (about), said: I go into my reception room. I see two men sitting there. Before they say a word I know that they are English or Americans! They do not rise. They sit there and do not move. They only bob their heads: "Good Morning." Of course this German woman believes that this is the custom of all English and Americans. Unscientific! but then —.

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appressed hairs :. = Erysimum asperum &c. I perceive that the youngish pods of Erysimum capitatum Greene as represented here by Baker n. 342, Crystal Springs and Keller n. 6537, Sand Hill Point Pinos are 3-stellate, the long fork pointing downwards.

Berlin, Germany

-Miss Lester Wright, student of the piano, home Honolulu, education California, age 21 or less, independent type of American girl but "nice", not aggressive in the least; well-raised, good connections, wholesome, hearty, taking a jolly view of existence, able to take care of herself, says:- It makes me wroth. Why in this place a girl can't go out alone in daytime even on the street but that some man comes up and speakes to you or if it's raining holds his umbrella over you and asks if he may walk along with you.— And what about the ten thousand German girls one sees walking

April 11, 1906

on the crowded streets? I asked. They are not "nice" (i.e. they don't belong to "good society" as we know it, they are bourgeoise. They are well or even pleasingly or stylishly dressed, but it is expected if you go out alone without a chaperone or ugly aunt that such things happen. Pug, it makes me hot. Of course I go alone everywhere. I have to, but it makes me hate 'em".

Der Kuhfladen = Cow pancakes, literally

Berlin, Germany

Good Friday – saw the Emperor and family leave the ~~Friedrich~~ Kaiser Wilhelm Kirche in open carriages – the Emperor and his sons in full uniforms. The crowd was large but was not specially demonstrative, in fact very very quiet.

= Each nation has a tremendous "notion of itself." When one has bumped about the world a while you notice that the German gives you the highest possible compliment when he says you dance as well as a German, the Englishman says your accent is not at all American!, the New Englander says (if you are half-nice) of course you came from New England, – the New Yorker is too cosmopolitan to say things like that and the Frenchman too tactful.

April 13, 1906

= Frankenia grandifolia C.&S. Type spm. Label in Chamisso's hand. "ad Portum Sancti Francisci Novae Californiae in sabulosis logis mense Octobris. A.D. MDCCCXVI. Ad. v Chm". Specimen suffruticulose, 2 dm. high; leaves thickish, blackish, 8 mm. long, 2 or 3 mm. broad, obovate or oblong-obovate. Stems with short spreading hairs; leaves minutely puberulent, also calyx. The whole plant seemingly glandular.

= F. latifolia Presl. Rel Haenk, differs from above in being well-nigh glabrous. Leaves (longer) 12 mm long.

= Hypericum anagalloides C.&S. Type. 3 wee scraps 5 ~~dm~~ cm. long. Glabrous Leaves elliptic, entire, 6 or 8 mm. long, 5 mm. broad or less. There are

Berlin, Germany

flowers present but not "get-at-able" - very few little specimens, "miserable" in fact. Label in hand of Chamisso! "ad portum St. Francisci, Nova California". Small plants with narrow leaves collected also by Hillebrand in the Oakland Hills, 1863, "wet places"

= Phacelia circinata Jacq. A spm. coll by Bertero, 532 + 1229, Sept. 1828, at Rancagua, la Quinta, Chili. is exactly like a spm. by Wright - in foliage, pubescence, flowers. The S. Am. thing is like our ordinary Coast Range form with a pair of supplementary leaflets, shortly-pedunculed shortish racemes, - not like imbricata or California. The S. Am. has a softish pubes.

April 19, 1906

beneath the bristly pubescence.

= Phacelia malvaefolia Cham. & S. Type! Label in Chamisso's hand. "Ad Portum St. Francisco Nova California legit. Ad. V. Chaw" Scrap, branchlet 15-cm. long. Largest leaf 3.5 cm. long, unequally toothed but not distinctly and sharply double toothed as in Kellers 5702 Lake Merced which is identical in all other features - bristly character (pustulate dilated bases to bristles as in original) etc.

- Heard last night the news of the fearful earthquake in California. It is next to impossible to work or keep one's thoughts in order.

Berlin, Germany

- Phacelia Californica C.&S. Type. Label in Chamisso's hand. "St. Francisco, California. A. von Cham." Two leaves only, one a fragment! The complete leaf is 11 cm. long: terminal leaflet 5 cm. long, 1.3 cm. wide, oblong, acute at base and apex; first pair of lateral leaflets below terminal 3 cm. long, 6 mm. wide, the shape like the terminal. Next pair 2 cm. long, lowest pair 1 cm. long. Rachis and leaflets bristly hairy and also with a finer pubescence or indument below. Whole effect whitish. Not unlike the foliage of Hall's 1261. lab. "P. circinata calycosa." It is also a good match for Heller's 5701 Lake Merced, labeled P. californica Cham. but it would be

April 20, 1906

- Phacelia nemoralis Greene. First collected by Hillebrand, 1863, Oakland. Why may not this be a natural hybrid between P. circinata of California and P. malvaefolia?

- P. Californica, cont. from bot. prev. p. as good a match for forms ~~not~~ different from the blue-fl. P. Californica Cham. teste Greene. which is Heller's determination.

- Harkelia Californica C.&S. Type. Terminal portion broken off a fruiting stem. "San Francisco, Californiae Mense Octobris, 1816. legit A.v. Chy" Calyx 15 mm. long. Calyx-receptacle cup-shaped, 6 mm. broad, 5 mm. ~~tro~~ high. The bracklets are as long or longer atho' not quite as broad as the sepals. Calyx with an

Berlin, Germany

indument and short hairs. The pub. has a glandular appearance. The calyces are bigger and coarser than shown by anything elsewhere - several fl. spms from Coast Range but calyces very small.

= Orobanche pinetorum Geyer. Cf. Beck. Orob. p. 84. Hansen, 247, Pine Grove, 2300 ft.

= Orobanche fasciculata Nutt. Det. by Beck. Humboldt Co. V. Rattan, June, 1883, has peduncles up to 25 cm. long!

= Rosa Californica C.T.S. not here.
I.E. Keine Exemplar von Chamisso!
= Rubus vitifolius C.T.S., Keine exemplar von Chamisso!
Dr. Loesener says these two may be in Halle, where as I

April 21, 1906.

understand it, Schlechtendal worked.

Things are in such confusion here incident to the moving from the "Altes Botanisches Garten" to the New Garden at Steglitz that I find difficult to find any specimen wanted and particularly any book for reference. Another of Chamisso's spms. that I fail to find is - Aphyllon Californicum C.T.S. Aphyllon by the way is not recognized in Engler & Prantl, being referred to Orobanche.

- "Give a lie twelve hours start and the truth will never overtake it."

Berlin, Germany

- Miss Janet Perkins says that after getting through school she went to California for her health and lived a year at Gilroy. Her mother lived there - a woman who had a great interest in flowers, a keen observer and one who had a share of experience regarding nature. Miss Perkins did not like Gilroy, naturally. She had been used to the best society of a large city, Chicago, and now she fraternized with the butcher boy, etc. She taught music. "They" came to her in succession. One boy wanted to learn to play the harmonica. But Miss Perkins said that she knew nothing about the harmonica! She

April 21, 1906.

played the piano. But the boy insisted that they were quite alike and so she gave him piano lessons. Another boy came: she discovered he had lost all his fingers - a thumb missing! But he wanted to play at a concert two weeks thence and he managed to pick his instrument and get through his piece. A prairie agent proposed marriage. He insisted that she could never do anything there, that as she talked French & German, that as he was Swiss of good family and had $20000.00 it would be the best thing for her. Her characteristic is all this

"The only argument you can have with the East wind is to button up your coat." - James Russel Lowell.

Berlin, Germany

of an early community! Mrs. Perkins liked California; she knew some nice people, Prof. Greene, Dr. Bleaine, etc and moreover as California had taken its hold on her as it does on everyone who stay long enough she was unwilling to leave it and died in Berkeley.

Miss Perkins took her Ph.D. at Berlin. She worked at Chicago under Coulter before Coulter had left Lake Forest. Coulter came in once a week. Chamberlain was there. He is a brainy man.

-What is worse than a giraffe with throat trouble? A centipede with chilblains.

April 21, 1906.

= Eschscholtzia californica Ch Type. Two sheets. "Legit Chamisso Portum Sancti Francisci Californiae in arenosis A.D. 1817. (de Chamisso)". This label is not the hand of Chamisso. The label of the other sheet "In California leg.d. Chamisso. Chamisso ded. 1820" may be.

Caulescent, the leaves about 3-3.5 cm. long (exc. pet.), divided into linear segments 1/4 to 1 mm. wide, mostly 1/2 mm. wide, 2 to 5 mm. long.

I find it difficult to detect any pubescence on the specs. At the base of one petiole I discern 3 or 4 short hairs.

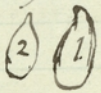
"People who live in grass houses should not keep cows."- ?

Berlin, Germany

Peduncles 4 to 10 cm. long.
1. Torus rim 2 mm. broad on a fl. past anthesis - petals fallen.
2. Torus rim on fl. in anthesis rather less than 1 mm. broad.
3. Torus rim on a flower well past anthesis 3 mm. broad.
All above on same sheet!
4. Fl. in anthesis rim 2 mm. broad.

Receptacle in anthesis 2 to 4 mm. long.

Two calyptras, one = 1 cm. long, 5 mm. broad (pressed), acute, the other 9 mm. long, apiculate, 4.5 mm. broad.



The figs not quite to scale or rather not size but very close.

April 22, 1906

Petals fl. No. 1. = 1.7 cm. long (= no. 4. opp.
Petals fl. No. 2. = 1.5 cm. " (= no. 2 opp.
The glaucous character the foliage is not very obvious.

There are a number of smaller buds on the plant but I selected for measurement the two full grown ones.

= "Franseria malvaefolia Wgr. Fr. Chamissonis & malvaefolia Lessing. Nova California. St. Francisco. Chamisso (Linnaea, 1831, 507)". The male "spike" is not very dense, 2.2 cm. long. The fruits below look typical of Chamissonis. The leaves are quite Sidalcea or better Sida-like, thick, unequally toothed, the teeth small, and the margin as if somewhat crumpled (flat undulate), deltoid-ovoid, 1.6 cm. long, 1.2 cm. broad, densely white hairy or

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- Die Stern-bild-blume - Chrysanthemum.

Berlin, Germany

or almost silky, the stem canescent hairy as well.

The original exemplar of Chamissonis or rather Lessings Franseria Chamissonis is not there.

= Dr. Janet Perkins feels very strongly about the attitude of the New York and Washington people. They will not send their things; they make species but they will not let the rest of the world see their material. Work should be international. It should have an international character. Determination of species, of genera should be international; they should have the broadest foundation. It is wholly unscientific to make genera based simply on the representatives in one region without

April 23, 1906.

taking into consideration plants of the group in other regions. Everything should be done with the highest, purest, most simple minded motives. The single idea should be to help along. To do something which shall make it easier for those who come after - not more difficult. The problems of systematic botany of the next generation are not those of this. The ground should be cleared as much as possible, the advance, the preparation should be as much as possible. The end of systematic botany is not the determination of species, nor the splitting up of genera. All this is preliminary and should not

Berlin, Germany

be hedged in with uncertainty or semi-mystery.

< Millspaugh, Director of the Dept of Botany, Field Columbia Museum, Chicago, is here looking up Euphorbiaceous types. He was at Cornell, in the Secretary's office in some capacity as a young man and was told off to show all the big visitors about the grounds. In this way he became acquainted with Henry Ward Beecher, George William Curtis, and many others. As a barefoot boy in Cornell town (Ithaca) he first saw Louis Agassiz. He was standing in the middle of a stream with a frock coat on and a silk hat and looking intently at something. He called to the boy. "Boy, come here!" But the boy at first was afraid of such a strange creature and shied off. Then Agassiz showed him minnows building a nest for their eggs by pushing pebbles with their noses into a circle. Agassiz took him on walks in the surrounding country which he declared to be the richest region in the country for geological, zoological and botanical studies.

April 24, 1906.

Dammer,

Polygonaceae, wants Chorizanthe spinosa, Orcuttiana, Brewerii, valida (not all) and Nortoni Greene the latter in its variants. He pointed out to me that the Bolivian, displayed ochreae; in their habit some of them look marvelously like Polygonums of the perennial suffrutescent sort; some have the habit of montane tufted Eriogonums. They have very few spms. of Eriogonums here.

– P.

– How does one distinguish among "Syndicate", "Trust", "Company"?

– What is "religion"?

– Coelf. Botanical expl. – Parker, Overland Travl, 1835; mentioned by Dr. Samuels Willey. [This is Parker's Exploring Tour beyond the Rocky Mountains. Ithaca. 1844. It contains an interesting early map of the Oregon country with the localities made familiar by study of Douglas' species of plants.]

– Lyon. Cf. Lyon & Cobbe, 4 p. cat. of nursery stock, Los Angeles, 189[illegible]. Coelf. Collector,

– Muir, John. Coll. only scraps I suspect. See Gray, Syn. Fl. 1[2]: 272.

Addresses.

– Dott. G. B. Traverso, Libero Docente di Botanico, Assistente Nell' Instituto Botanico della R. Universita, Padova, Italie

– Jacques Delpech, Ingenieur Diplômé E.P.C., Chemist at the fabrik of artificial silk, Padova, Italie.

– Mr. T.A. Sprague, Kew, England.

– Miss Leslie Wright, 28[III] Kleist strasse, Berlin, W.

– Miss Christine Beck, 141 Holland Rd, London, W.

– Miss Annie F. Brown, Oakland. Cal.

– Miss Gertrude Moller, " "

– Mr. Jos. Griffin, Berlin, W. Kleist Str. 28[III]. Electric Engineer

– Miss Elizabeth Lewis, Pol. Econ. Berlin

– Frau Köhn, Pension, 28[III] Kleist st Berlin

Subjects for Students.

- Position of cotyledons in Cal. Cruciferae, Lepidium and related genera.
- Cuscuta subinclusa, hosts, germination. Cf. Schimkfer. p. 126.
- The number of fls. which set fruit in a cluster and the reasons therefor. zum Beispiel: Ceanothus thyrsiflorus with masses of fls. but nothing like the number of fruits. Sterility and its causes.
- Why no Alder seedlings in Strawberry cañon? Germination tests. Comparison with other species.
- The Passing of the Valley Oak, The Cuscuta in the Marshes, The Sycamore and its relation to Climate and Temp. in California. Trespasses not on the Redwood Belt.
- Sequence of Leaf-form in Ranunculus californicus.

Californian Collectors.

= Guirado, State Survey.
= Lobb, Wm.
= Heermann, (Pac. R.R.)
= Bridges, Thos.
= Murray, Wm.
= Beardsley

Escscholtz, J. F. In "Mémoires de L'Academie Imperiale der Sciences de St. Petersbourg" Tome X, (1826). pp. 281–292. Eschscholtz (sic!) has a paper "Descriptiones Plantarum Novae Californiae, adjectis florum Exoticorum analyticis" (Conventui exhibuit die 18 Junii, 1843). He describes as new: Abronia latifolia, in Latin, with ample descrip. Hoitzia squarrosa, Polemonium capitatum, Solanum umbelliferum, Ribes tubulosum, Lonicera Ledebourii (Cont bottom next p.)

Godetia : Eschscholtzia

Godetia, time of opening and duration of fls. Can single-stemmed forms be readily forced to branch in cultivation? Variation in pubescence under cultivation. Seedlings of amoena. How early, after anthesis, do they come into flower? Possibility of crossing amoena and Clarkia elegans? Variation in length of style? Godetia quadrivulnera – calyx united and turned to one side or distinct sepals? Is this ever a matter of age? Are the early fls. with united and later with distinct sepals? Test collapsing of ribs drying with and without pressure. Try periodic watering of cult. plants, watering near end of natural season and compare with dry-soil plants. No. of rows of seeds in cells?

Eschscholtzia, duration of fls. of rhombipetala? Do all species flower the first year? Are there any strictly biennial species?

Cont. from bottom prev. p.

Ceanothus thyrsiflora, Rhamnus Californica, Velezia latifolia, Eriogonum arachnoideum, Hendecandra procumbens, Lupinus Chamissonis, – then follow notes on peruvian plants and others. The Calif. descrip. end p. 289.

penitus, inward, interior, classically used of a country, as a remote country.

disjunctas, severed.

remotus, used like penitus classic. but with botanists as to distant parts of organs in arrangement.

ingratus, displeasing.

– Coulter, Dr. Cf – Royal Geog. Jour. for 1841. (vol. 11; p. 215-249.)

– Cont. from p. 75. How I could have put Penzig down as an Italian when he was a German I cannot now tell. Sir Thomas Hanbury had recommended me to him.

Addresses, 1906.

= M. F. Gagnepain, Botanic Garden, Paris, collab. with A. Finet on "Contrib La Flore de L'Asie Orientale" (M. Thelling, working on Epidium)

= Franz Herrmann, 5 Rue Alboni, Passey, Paris, France.

= Sir Thomas Hanbury, Lady Hanbury, Mr. Pease, Lady Northcote - La Mortola, Ventimiglia, Italie.

= Dr. Penzig, Hanbury Institute, Orto Botanico, Universitet di Genova, Genes, Italie.

= Percy Brammell, 29, Rue Vineuse, 16e., Paris, France, who so kindly gave me street directions on the Paris Subway.

= Giuseppe Pappalardo, Vicozianto Provigico di Salerno, Cetara, Italy.

= Miss Annie Florence Brown, 566 Caledonia Ave. (Main 1074.)

Wells Fargo Checks

= Thomas Cook & Son, Rue de Rivoli, Paris, No. 10022992, Feb. 7, 1906.

= Wells Fargo & Co's Cannon st London Office, No 10 22 998, June 1, 1906.

Carl Stangeró ticket Office Berlin.

Addresses, 1906

- Mrs. William Coldstream, H.M. Bengal Civil Service (retired), 69 West Cromwell Road, S.W.

- Mr. & Mrs. J. Page Hopkins, The Rozere, Shepperton on Thames.

Hotel Brittania, Mentone, R. 3. B. 1.25

Books Wanted.

= Nemec, Dr. B. Studien uber die Regeneration. Gebruder Borntraeger Berlin, S.W. Dessauerstr. 29. (1905) – Concerned with plants!

= Solms-Laubach, Die leiteneden Gesichtspunkte einer allgemeinen Pflanzengeographie in kurzer Darstellung. Arthur Felix, Leipzig (1905).

= Lubbock. Buds and Stipules, No. 86 and Seedlings #79 of Intern. Sci. Ser. (Kegan Paul Trench Trubner & Co.)

= Legends of the Monastic Orders as represented in the Fine Arts, by Mrs. Jameson, Longmans, Green & Co, 15 East 16th st., New York.

Rec. by General & Mrs. Greenleaf.

Berlin, Pension Fulleborne, 44 Jerusalemstr. "Best"

Amsterdam. Bracksdoelon Hotel.

Heidelberg; Pens. Nabel. cheap & good.

Stuttgart, Pens. Olga, Strasse 31

Wiesbaden, Villa Helene, 9 Sonnenbergerst 5 to 6 M.

B. F. Stevens, 4 Trafalgar Sq. U.S. Dispatch Agent.

Addresses.

Mrs. Emma N. Swift, Blackwell, Oklahoma.

Hotels

Hotel Victoria Cave, R. 3 fr. good.

Hot. Marine Riviera, L. 3 fr. Excellent.

Hot. Royal. Sorrento, R. 3 fr. "

Hot. Savoy, Rome, Pens 10 fr. "

Hot. du Nord, Florence, " " (R. 5 fr.)

Hot. du Rome, Venice, Pens. 10½ fr.

Hot. de France, Milan, Pens 8 fr. good!

Hot. Florence, Bellagio, R. 3. B. 1.25. Room 3 fr. Din. 4 fr.

Hot. Helvetia, Lucerne, simple and good. Used Cook's Coupons but cheaper doubtless

Hot. Concordia, Lucerne, Room 2 fr.

Hot. Bristol, ", swell, " 3 "

Lodgings

K. Kirkman, 57 Brompton Sq. London, S.W.

Hotel de Nice, 4 bis, Rue des Beaux-arts, Paris. 5 fr. inclus.

Hot. Lugano, Lugano, fair, 2d class.

" Prince Albert, 5 Rue St. Hyacinthe, Paris Room 3.50, B. 1½

Lugano, Pension Meister, Best.

Neuhausen, H. Bellevue,

Basle. Hot. Bauer-au-Rhine.